

Originally Processed With FOIA(s):

S

FOIA Number:

S

# FOIA MARKER

**This is not a textual record. This is used as an administrative marker by the George Bush Presidential Library Staff.**

---

**Record Group/Collection:** George H.W. Bush Presidential Records  
**Collection/Office of Origin:** Speechwriting, White House Office of  
**Series:** Speech File Backup Files  
**Subseries:** Chron File, 1989-1993

---

**OA/ID Number:** 13685  
**Folder ID Number:** 13685-003

---

**Folder Title:**  
Centennial of State of Montana 9/18/89 [OA 6268] [4]

---

Stack:	Row:	Section:	Shelf:	Position:
<b>G</b>	<b>26</b>	<b>19</b>	<b>3</b>	<b>5</b>

---

United States Senate  
WASHINGTON, DC 20510-2602

I'm enclosing the information you requested. Please do not hesitate to call if I can be of further assistance.

Sincerely,  
Max

# MONTANA Centennial 1889-1989 MONTANA '89er

THE OFFICIAL NEWSLETTER OF THE  
MONTANA CENTENNIAL COMMISSION AND OFFICE

## OFFICIAL CENTENNIAL PARADE

An estimated 40,000 people reviewed the Official Centennial parade in Great Falls Saturday, July 22. Brian Patrick, Centennial Field Operations Manager said the office staff gave out 4,000 Centennial buttons and said he doubted if they were able to supply one-tenth of the people lining the parade route.

Leo Ellingson, Centennial Statehood Director said the very successful parade went off like clockwork, and he had high praise for the organizers, the Cascade Centennial



*Happy Birthday, Montana, in the form of a huge cake was one of the floats in the Centennial Parade held in Great Falls July 22.*

'89ers and Jeff Cuniff of Great Falls who was Centennial parade chairman. The parade was 19 blocks long with no gaps, and took three hours to pass by.

There were 370 parade entries, 100 antique cars, 400 horses. There were entries from 25 communities. In addition to the entries from Montana, there were floats from Calgary and Lethbridge, Alberta, as well as Swift Current, Saskatchewan, Canada.

Riding on the official float driven by Mark Copenhaver were Iva Kolstad, wife of Lt. Gov. Allen Kolstad, Leo Ellingson and Marilyn Frazier, member of the Centennial Commission.

Cuniff said 65 dignitaries participated in the parade, including Governor Stan Stephens and Mrs. Stephens, State Auditor Andrea Bennett, Attorney General Marc Racicot and Montana Supreme Court Judge Bill Hunt.

The Calgary Expedition Stampede sent 40 members who served breakfast to 3000 parade participants and workers, and furnished entertainment. Accompanying the

*continued on page 4*

CENTENNIAL WAGON TRAIN	2
RELIGIOUS HERITAGE DAYS	5
WILLARD SCOTT IN HELENA	11
CENTENNIAL EVENTS CALENDAR	15

## FROM THE CHAIRMAN

The Great Montana Centennial Cattle Drive from Roundup to Billings is still the biggest event of the Centennial, and is scheduled for September 4-9. Only big people with big imaginations from a big state would dare plan and pull off such a gigantic project to observe their state's Centennial. It should be the biggest cattle drive in the history of the world.

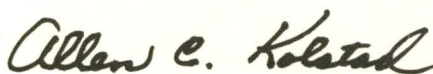
When you travel outside Montana, and you mention the Centennial, it is surprising how many people all over the country have heard of the cattle drive. It has received international publicity. As a matter of fact, it will receive international participation. People from four countries and 29 states are involved. Cowboys from as far away as Australia and Japan have inquired about heading 'em up and moving 'em out.

As envisioned, a herd of 10,000 cattle, herded by 100 top hands and 4,900 other riders, will make its way from the Musselshell River at Roundup to the Yellowstone River at Billings. That was the original dream. Of course dreams sometimes surpass reality, but any great project must start with an optimistic dream.

The herd will include longhorns like the ones Nelson Story brought north from Texas in 1886. A special brand, a stylized M over 89, will mark all the cattle which can be auctioned at trail's end.

More than 2,800 people have signed up to ride in the drive, which is to be led by 300 wagons, each carrying between three and six people.

Imagine the logistics involved. There are a lot of skeptics out there who doubt if it will ever happen successfully, but I'm confident the people in charge know what they are doing, and I offer my congratulations to the Latigo Corporation for a super organization.



Lt. Governor Allen C. Kolstad  
Chairman, Centennial Commission



## CENTENNIAL WAGON TRAIN ARRIVES IN HELENA

In a ceremony on the state capitol steps, Lt. Governor Allen Kolstad welcomed the Centennial Wagon Train on its arrival in Helena July 3. He told the crowd gathered for the occasion, "If you really want to learn what a wagon train trip is like you have to ask the trail weary folks who are with the Centennial Wagon Train today. These saddle-weary, seat-bruised adventurers have been on the trail. They know some of the hardships that can occur on a journey of that nature. Of course, they weren't as isolated and didn't have to face as many of the life-threatening dangers as those who came west 100 years ago, but they have experienced much of what the early settlers experienced, and I know it has enriched their lives."

Kolstad chided the western movie versions of wagon trains and their thrilling adventures, and of the trains forming a hurried circle as the Indians rushed screaming and shouting down upon them. In fact, most records show that the wagon trains were the first opportunity that the Indian and White had to become familiar with each other, to trade, to share knowledge about the trail and to learn that circumstances are the only true difference between men. He encouraged people to read about the early days of Montana, especially journals and diaries written by early day settlers.

To the early settler the wagon train meant a chance to start life over, with greater opportunity in the promised land west of the Mississippi.

*continued on next page*

### MONTANA CENTENNIAL OFFICE

#### VOLUNTEER COMMISSION

Lt. Gov. Allen C. Kolstad, *Chairman*  
Patricia DeVries, *Polson*  
Nancy Y. Dumont, *Wolf Point*  
Rita Edwards, *Glendive*  
Marilyn Bogut Frazier, *Great Falls*  
Frank I. Haswell, *Helena*  
James Haughey, *Billings*  
David C. Johns, *Butte*  
Robert J. Kelly, *Missoula*  
Nancy McCaslin, *Bozeman*  
Tonia Stratford, *Miles City*  
Debbie Vandenberg, *Havre*

The monthly Eighty-Niner presents news and views in celebration of the 100th anniversary of Montana's statehood in 1889.  
For information call 444-1989

#### OFFICE

##### Lt. Gov. Office:

John Kinna, *Executive Assistant*  
Denise Thompson, *Executive Secretary*

##### Centennial Commission Office:

Leo Ellingson, *Centennial Director*  
Irvin Hutchison, *Editor '89er*  
Carolyn Linden, *Sanctioning Secretary*  
Brian Anse Patrick, *Field Operations and Grants and Sanction Manager*  
Judy Fisher Rolfe, *Receptionist*  
Susan Worl, *Commission Secretary*  
Jeanne Amsberry, *Acres Secretary*  
Mark Copenhagen, *Float Coordinator*

P. O. BOX 1989, CAPITOL STATION, HELENA, MT 59620

## MONTANA WRITERS' PROJECT ANTHOLOGY

*Faded Hoof Prints—Bygone Dreams* is the title of a Centennial book published by the Powder River Historical Society of Broadus, Montana. The book contains stories from Montana's Greatest Livestock Frontier, Powder River Country. It contains 300 pages and the stories are from the Montana Writer's Project of the Works Project Administration from the 1860s to the 1920s. It was compiled by Maude L. Beach and edited by Robert L. Thaden, Jr.

The stories are from micro-film records that are being preserved and stored in Denver depicting life as it was when the southeastern part of Montana was being settled. The stories were collected by two WPA employees under the Montana Writer's project in the late 1930s and early 1940s.

The stories are described as pertinent to the Centennial because they relate in the interviewees' own words their lives and experiences during that part of Montana's history when the near extinction of buffalo transpired and the cattle drives from the south impacted and influenced our state's economy and commerce.

Many personal observances are given to these experiences, some humorous, some tragic in their quest for money or eking out an existence. Some references are also made to the ongoing conflict between cattlemen and sheepmen.

A copy of the book may be obtained by writing Powder River Historical Society, Box 575, Broadus, Montana 59317. Please enclose \$20.00.

## RAILROAD SHOW

Railroads were crucial in the development of Montana. In an attempt to demonstrate this well-known fact, a railroad show is scheduled for September 10 at the Rodeway Inn in Billings. Collectors of railroad memorabilia will display and sell items from their model railroad collections. There will be specific displays concerning Montana railroads.

A nominal \$1 admission fee will be charged, and profits, if any, will be used for future shows.

He continued, the wagon train was also a challenging, spirit-breaking, nerve-rending, experience that left tragic reminders along the way that some people just weren't meant to experience life in the Big Sky Country. Storms, floods, prairie fires, disease and accidents of all sorts claimed the lives of many who were looking for a better place to live.

The Wagon Train received a warm welcome, not only from the large crowd waiting at the Capitol, and from Lt. Governor Kolstad, but also from Western District Congressman Pat Williams and Helena Mayor Russ Ritter. All three speakers applauded the efforts of all the riders and the Montana Draft Horse and Mule Association which was responsible for organizing the Wagon Train.

There were 200 participants who covered the 250 miles of the wagon train trip from Bannack to Helena.

Robert Clark, Wagon Master, and Wayne Tichenor, Trail Boss, received congratulations and commemorative belt buckles from both Lt. Governor Kolstad, Montana Centennial Commission chairman, and Steve Hankey, Regional Sales Manager for Rainier Brewing Co., a major sponsor of the Wagon Train. Marlene Teague, secretary-treasurer of the Montana Draft Horse and Mule Association and Leslie Clark, secretary of the Montana Centennial Wagon Train, also received a round of applause for their organizing efforts.

All the hard work and preparation paid off in a big way as the 50 wagons safely and successfully reached their final night camp. Participants gave many compliments to the organizers for the research done on the trail. Of the 250 miles, less than 20 were traveled on blacktop. The route took the wagons over the Continental Divide, up and down the steep gravelly mountains, along the high foothills of the Tobacco Roots, and up the Amazon Hill close to the little town of Wickes, on the 24 day trail to Helena.

These wagons were not new models that had just been recently purchased. Almost all were from the turn of the century and had been painstakingly rebuilt by the owner. Along the way, repairs were required on several wagons, but with the help of neighboring ranchers, wheels, tongues, and

wagon boxes were all fixed and the wagons were able to continue on their way. If a sick or sore horse was unable to continue, arrangements were made to borrow a horse from another driver until the horse was able to work again.

The travelers encountered all kinds of weather from snow to intense heat along with hail and wind storms. It was agreed that this year's cool June weather was a real bonus for the horses and that the trip may not have been possible if extreme heat had prevailed.

Many riders suffered from bouts of the flu and some even contacted pneumonia and tick fever. A teamster from Idaho suffered a heart attack while in Willow Creek, but was able to receive immediate medical attention and is now recuperating at home.

In all 30 wagons made the entire trip from Bannack to Helena. Of these wagons, 25 were from Montana while 2 had come from California and 3 from Idaho. No less than 40 wagons were traveling on the trail at all times and in all 300 people and 75 wagons participated in the entire 24 day event.

Some hardy souls traveled even further than from Bannack to Helena. Jim Lotan, Wagon Master of the Bitterroot Centennial Wagon Train, and his wife Ruth, along with Carol Tichenor of Whitehall, Patrick McCarron and Kathy Meyer of Stevensville, and George Woolsey of Victor, traveled all the way from Stevensville to Helena, a distance of 400 miles and a trip that took over 5 weeks.

Cotton Riley, of Richfield, Idaho, drove his mules all the way from his home to Bannack, adding an additional 150 miles to his journey. Jim and Debra Deck didn't bother to trailer their horses and wagon home like most everyone else, they just hitched up and drove the wagon back to Whitehall!

The Montana Centennial Wagon Train not only received a warm welcome in Helena, but also in every single town it traveled through. The Wagon Train went through Dillon, Virginia City, Ennis, Pony, Willow Creek, Boulder, Jefferson City, Montana City and Helena and in each town a special celebration had been planned. The Wagon Train became the occasion for numerous barbecues, pancake breakfasts,

## Parade, continued

group was the Calgary Stampede Queen, Bonny Wallace. The Calgary Stampede mascot, Harry the Horse, was also present.

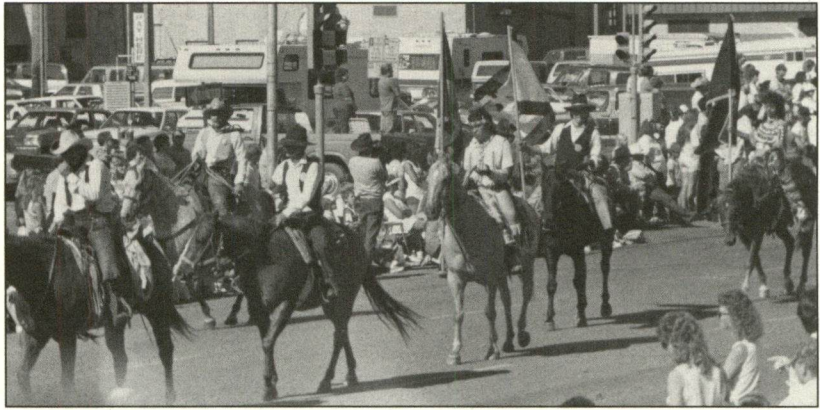
An ice cream social and awards ceremony followed the three-hour parade. For the third consecutive time in parades held in Great Falls, the Great Falls Advertising Federation won the top parade award. Previously they won the top award in the Territorial parade in 1975, and the Great Falls Centennial Parade in 1984. The award is all the more significant because it is believed the 1989 Montana Centennial parade held Saturday was the largest parade ever held in the state of Montana.

There were nine divisions in the parade and the Western division was won by Pa'u Waimenalo of Hawaii, featuring 12 riders on horses decked with traditional Hawaiian leis. Five female riders, also well decorated, represented the five islands of Hawaii. Cuniff said this entry was especially popular with the large crowd.

Lincoln, Montana took the best public service entry contest with a float entitled "Main Street 1889." The Youth contest was led by Livingston's "Razzle Dazzle" drill team made up of youths 5 to 13 years old.

Following the awards ceremonies was the Big Sky Day at Malmstrom Air Force Base. An estimated 40,000 people attended. There was also an aerial demonstration by antique airplanes. Saturday evening's fireworks were spectacular, according to all accounts, and the Centennial Ball was a smashing event.

Cuniff said it was truly a statewide event, not just a Great Falls parade, and extended his congratulations to the people of Montana for taking part. He said he has been working on parade preparations for 1 1/2 years, and expressed appreciation for the cooperation he has received. He also remarked on how well the people of Montana are responding to the Centennial and said, "If it's worth doing, it's worth doing well."



*Just a few of the 400 horses that took part in the Centennial Parade.*



*American Foreign Wars veterans march in the Centennial Parade in Great Falls.*



*Old Glory, and long may she wave. This large flag was carried by numerous people in the Centennial Parade.*

*Parade photographs by John Hutchison, Chester*

## "PILLARS OF THE PAST" PARTY

The Centennial year was celebrated at St. John's Lutheran Home in Billings on July 30th with a special event honoring Yellowstone County's centenarians. Family and friends of these special seniors were invited to observe the recognition. Dwight McKay, chairman of the Yellowstone County Commissioners made the presentations.

Kristin Rapacz, administrator of St. John's-Rimrock, stated "This annual Family Day event is in honor of the state of Montana's Centennial and gives St. John's another opportunity to recognize our residents and other seniors in Yellowstone County who have reached the 100 year milestone in birthdays. Nearly twenty centenarians have been located; however, due to health reasons some were not able to attend."

St. John's staff also awarded certificates to their residents who are Montana natives. "Surprisingly, nearly 60 of the 300 residents are native to this wonderful state," Rapacz commented. Families of the staff and residents attended. Lawn games, family portraits, refreshments and socializing were the focus.

The residents organized a terrific heritage display with many unique antiques in the hobby room. Each item was marked with a description, date, and donor's name.

This event was sanctioned by the Montana Centennial office.

## READING SERVICE POSTER PREPARED

Western Montana Radio and Reading Service is preparing a promotional poster as a sanctioned Centennial project. The poster will describe the service offered to the blind and print handicapped, and denote the 10th anniversary of the Service. The poster will be distributed at Visual Services, pharmacies, eye doctor offices, Senior Companion programs, Montana Association for the Blind, Montana Library for the Blind, in the coverage areas, including Missoula, Bigfork, Butte, Helena, Great Falls, and White Sulphur Springs.

This is a non-profit project, and any donations will be used to purchase equipment, expand or upgrade services, and offset administrative costs.

## RELIGIOUS HERITAGE DAYS

Governor Stan Stephens has proclaimed November 1-8 as "1989 Centennial Religious Heritage Days," and has asked all churches in Montana to observe these days in their worship services. In his proclamation Governor Stephens said:

### STATE OF MONTANA

#### PROCLAMATION

**WHEREAS**, in the development of many of the communities of Montana, churches were among the first buildings erected; and

**WHEREAS**, the growth of these communities was centered around church activities, and the influence of these churches was a strong factor in the lives of the pioneers; and

**WHEREAS**, faith in God has played a strong role in the development of not only Montana but also the United States of America; and

**WHEREAS**, the Montana Centennial Commission has resolved that the first week in November shall be known as "1989 Centennial Montana Religious Heritage Days",

**NOW, THEREFORE, I, STAN STEPHENS**, Governor of the State of Montana, do hereby proclaim the dates of November 1 - 8, as

"1989 Centennial Montana Religious Heritage Days"

I urge the public to take advantage of these days by attending the church of their choice. I also urge congregations in Montana to observe the Montana Statehood Centennial in their worship services during this time.



IN WITNESS WHEREOF,  
I have hereunto set my hand and caused the GREAT SEAL OF THE STATE OF MONTANA to be affixed. DONE at the City of Helena, the Capital, this 29<sup>th</sup> day of June in the year of our LORD, one thousand nine hundred and eighty-nine.

*Stan Stephens*

STAN STEPHENS  
Governor of Montana

ATTEST:  
*Mike Cooney*  
MIKE COONEY  
Secretary of State

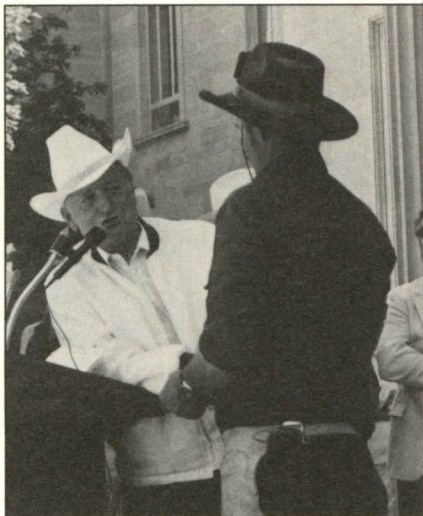
The Centennial Office will attempt to mail a copy of the proclamation, printed on parchment paper, to every church in Montana, to post in the narthex. However, the Centennial mailing list of churches is not complete. Any church that has not received a copy may obtain one simply by writing the Centennial Office, P.O. Box 1989, State Capitol, Helena, MT 59620. Also sent will be a list of suggestions which churches may find helpful in their Centennial observation, and a sheet of the Centennial logos, which churches are entitled to use in printings connected with the Religious Heritage in Montana Days observance.

## Wagon Train, continued

potlucks, and square dances and as all the riders soon realized, Montanans really know how to roll out the welcome mat.

For many of the participants, a truly inspiring memory will be the crowd of almost 4000 that came out to cheer them on in the little town of Willow Creek.

Of the 21 campsites, 15 were located on private ground. Some of these generous ranchers such as the Art Christensens of Dillon, the Earl Knightens of Ennis, and the Steve



*Lt. Governor Allen Kolstad presents Robert Clark, Wagon Train wagonmaster, with a Centennial belt buckle at the welcoming ceremony in front of the Capitol July 3.*

Jacksons of Norris, even took on the additional task of feeding the entire Wagon Train. Enough thanks cannot be given to these generous townspeople and ranchers who gave so much of their time to make this event a success.

Wagon Train organizers are pleased to report that the Montana Centennial Wagon Train has also been a financial success. Thanks to a grant from the State Centennial Commission, sponsorship from Rainer Brewing Co., and the sales of Wagon Train commemoratives, the Montana Centennial Wagon Train will be able to reimburse the participants for the money they spent on hay to make the trip.

Without the spirit and cooperation of all the participants, the Montana Centennial Wagon Train would not have been possible. It was at great personal and financial expense that they met the challenge of the trail. These people gave heartily of themselves in honor of Montana's Centennial. The Montana Draft Horse and Mule Association is proud to have organized this successful Centennial project and we salute all the participants — Montana's newest pioneers!

50 covered wagons may never circle up in front of the State Capitol again, but rest assured the Montana Centennial Wagon Train will live on in the memories of the thousands of people who had a chance to see this impressive sight.

## BALLOONIST CONQUERS ODDS

Aeronaut Sam Montoya beat—no, annihilated—the odds Sunday morning, June 25, winning a 1989 centennial Chevrolet pickup for pinpoint accuracy in his balloon flight.

It is considered rare that balloonists starting from more than three miles out can pilot their crafts so finely that they are able to pluck a key ring from atop a 25-foot pole.

Montoya has been piloting hot air balloons for only about two years, and he has never been in a key grab event. He said he has participated in similar club accuracy contests, but "never anything this serious."

To top it all off, Montoya's was the first balloon to launch that Sunday morning south of Miles City, and he was the first to reach the field. Many balloonists hang back to see what the wind is going to do to the other balloons, which are impossible to actually steer.

Shortly after launch, the ecstatic Montoya recalled, he thought he was in bad shape and would wind up about a mile west of the pole site in Mathis Meadows.

However, he caught an east wind, and as he drew close he knew he would at least reach the field.

With a considerable breeze moving him forward and a smoke bomb showing him the surface wind direction, he swooped in and grabbed the keys in a moment that seemed almost incomprehensible to him.

"I felt like the world stopped," he said. Then he landed the required 1,500-plus feet away, in the center of the track at the Centra.

The key grab can be a frustrating event, with pilots coming within inches of the keys. There was unanimous agreement that having a key grab winner was one of the best things that could have happened to the Montana Centennial Balloon Rally in addition to the almost flawless weather.

Co-chairman Kathy Schlepp said, "I'm so excited. And to think that guy (Montoya) won."

She noted there was one landowner whose horses were spooked by the noise from a balloon's propane burner.

Sponsors paid \$500 per balloon to help defray such costs as lodging, travel, propane and prizes.

(This article is excerpted from a longer article by Gerald Anglum of the *Miles City Star*)



*Hot air balloons over Miles City during the state sanctioned Balloon Rally held June 23-25.*

## FROM THE DIRECTOR

Since this is our Centennial year, we have a unique opportunity to participate in something that will only happen once in our lifetime. This means we must make it a special year...a year to be remembered for a long time to come and you and thousands of Montanans and visitors to Montana are doing just that.

If anybody thinks that Montana people aren't involved in their Centennial they should follow me around for a week and participate in the various activities that are taking place. Almost every town and village in Montana is pulling out all the stops to celebrate our Centennial. Last Saturday I attended a parade and celebration in Monarch, a town in Cascade County with a population of 65...over 1,000 persons attended the parade and full day of events ... One of 1,200 events and products our state office has sanctioned this year. The Centennial means different things to different people. To some it means a glorification of the past, of the cowboys, the logger, the Native Americans, the miners, the homesteaders. To others it means parades, balloons, fireworks, bell ringing and recording our history in many of the local communities. When you look over the events schedule for this year...you can't help be in awe of the variety of events that are going on. This is a birthday party in which everyone may participate.

To Montana, our Centennial represents a golden opportunity to increase awareness of our history, send a positive image nationwide, even enhance our business climate, as we play host to hundreds of thousands of tourists this year.

Our Centennial is attracting international attention, all the major networks, National Public Radio and Radio Free Europe with 34 million listeners are sending or have teams in the state covering the events. Uncounted national publications have asked for and been furnished materials so that they can write about our Centennial. Our office has responded to thousands of requests from all over the world. Perhaps most of you are aware that this Centennial celebration is being shared with Washington, and North and South Dakota this year. Idaho and Wyoming are celebrating their Centennials next year and we are working together on several joint projects. One project is the documents and traveling displays for all of our states. These will include the documents that lead up to statehood for the individual states. These exhibits will be prepared by the Smithsonian Institute in Washington, D. C. so we feel they will be superb exhibits. They will be funded by the minting of a special coin for the northwest area states.

In celebrating our Centennial we have one noticeable difference from our sister states...Montana did not fund its Centennial. The state of Washington appropriated about \$8,000,000, Wyoming \$1,000,000, the others in varying amounts. Our Centennial has been funded by the sales of Centennial license plates which certainly have not been as brisk as we would like them. Statewide only 5.4% of the registered vehicles have Centennial plates.

The Centennial office also receives a percentage of the sanctioned products that are sold. That's how the Centennial has been funded. Although we have granted \$500,000 to various projects...we still had \$1,200,000 in requests that were not considered because of lack of funds.

In spite of this the people of Montana have made this a



Several cars in the Montana Centennial Classic Car Tour

## CLASSIC CAR TOUR

The Montana Centennial Classic Car Tour sponsored by the High Plains Classics Car Club of Miles City and Eastern Montana was a tremendous success. The group left Miles City on June 18 following a breakfast and driver's meeting at the Miles City Eagles Club. They stopped in Sidney for a lunch put on by the Sidney Jaycees and spent their first night in Glasgow. Some of the group attended the theatre in Fort Peck, while others toured the Dam. Monday the group headed to Great Falls with a stop in Havre for lunch. Tuesday they parted, with some taking the Going-to-the-Sun Highway in Glacier Park and others traveling from East to West Glacier.

On Wednesday the club drove to Deer Lodge and toured the old prison and the Towe Ford Museum. That evening they arrived in Butte for a tour of the Copper King Mansion. Thursday morning the cars were paraded through Butte, ending at the Mining Museum where the cars were on display. By noon most of the cars were headed to Helena for the Awards Banquet. The tour concluded with stops in Bozeman, Laurel and finally Miles City, where they were met by a large group of area residents welcoming them home. The tour tied in with the Centennial Balloon Rally that was held in Miles City that weekend. The Miles City Shrine Bugatti Patrol and Whammy Wagon lead the parade with Balloon chase vehicles and local old cars joining the Tour Cars down Main Street and then back to Riverside Park for a barbeque.

The cars in the Centennial Classic Car Tour ranged from 1930 to 1971. Two 1930 Fords were on trailers, but the 1934 Chevrolet driven by Rita Philbrick, 81, of Forsyth, traveled the entire distance with only a slight clutch adjustment in Helena. Rita and her passenger, Max Blakesley, also of Forsyth, were enthusiastic participants, putting the little car through its paces and showing up two 1950s cars that couldn't make the entire trip. There were no other major mechanical problems and all drivers and their passengers reported having a marvelous time. The 26 cars that participated came from all areas of Montana and two were from Williston, ND.

The club hopes to make this an annual event, with plans for participating in Idaho's Centennial next year. Anyone interested in next year's tour can write or call: Bobbi Askin, 406 S. Jordan, Miles City, MT 59301, (406) 232-6133, evenings.

*continued on page 8*

## *From the Director, continued*

grassroots effort and communities across the state have dug in and found ways to fund their celebrations locally. I meet regularly with the executive directors of the other five states and I can assure you that we are not taking a back seat to any of the other states in this Centennial year.

Our schools have taken up the challenge by joining in the Centennial with special pageants, art projects, and the study of community history. The goal of our Centennial office is to have every community and every school participate by holding some kind of event, doing some kind of project, and right now we know that most of them are already on board.

We are also planning a statewide program for participation of all Montana churches in the final days before our actual birthday on November 8th.

Population wise, we have always been a small state ... but that smallness has already been a great blessing because it has made us a family.

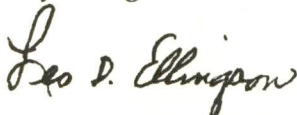
On the maps, Montana is so many square miles between boundary lines ... but in reality we are a family. And the greatest end result we could imagine from this Centennial year is already starting to happen.

The grassroots, volunteer emphasis of the Centennial is bringing this family of Montana closer together, just like the family reunions of years ago.

The pride we feel for our past can become the catalyst for the next 100 years of progress...because, in this great state and in this great nation, the future is not determined for us.

During the remaining months, all of us will have plenty of opportunity to reflect on what makes Montana special, on why it is unique among the fifty states.

By the time November 8th rolls around, and we hold our final Centennial party in Helena, we'll all be more aware that our "Old Montana" is just as fresh and spirited as it was a hundred years ago.



Leo D. Ellingson  
Centennial Director

## CENTENNIAL BUS IN MISSOULA

Mountain Line Missoula City Bus and KPAX TV are jointly promoting the "Centennial Express." One of the buses will be painted in a Centennial theme and will be operated throughout the Mountain Line, in Missoula, from mid-June to October 31st. Any person riding the bus will ride for free. KPAX will produce a 30-second commercial and run it 6 times a day until October 31. The official Montana Centennial logo will be on the rear panel of the bus, used for advertising and promotional material. This is a sanctioned Centennial event.

## INDIAN SIGN LANGUAGE TO BE RECORDED

Victoria Westermark, formerly of Shelby, Montana and now of Santa Monica, California, has scripting and is in the process of videotaping the Northern Cheyenne sign language as a part of the Lady Blackrobe Project, a sanctioned Centennial project.

As an educational and cultural event, the Lady Blackrobe project will videotape several portraits of the last of the old Northern Cheyenne sign talkers and the Indian sign talking language. The non-profit Lady Blackrobe project has been researching and developing a dramatic film with the Cheyenne since 1985 about the Ursuline sisters' arrival into their tribe in southeast Montana in 1884. Work with experts on Cheyenne within the community and Dull Knife Junior College in Lame Deer has led to this joint cultural preservation project.

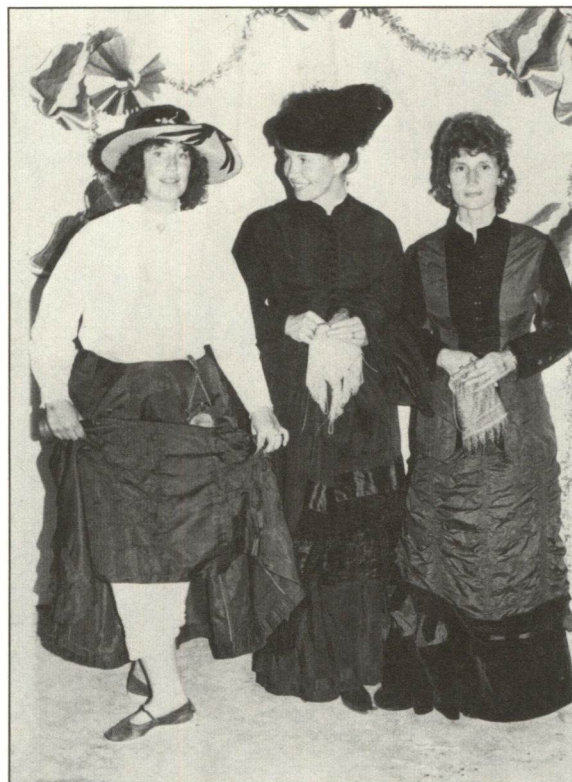
Unfortunately the sign talking language has not been passed down, and when these elder talkers pass away they will take their accumulated knowledge with them unless efforts are made to preserve this fast disappearing culture. The most recognized sign talker is Mr. Donald Hollowbreast, a community treasure who, as a journalist, has written and published cultural news of the Cheyenne people for 35 years. Mr Hollowbreast is deaf and has communicated in the old Indian sign language for most of his life.

Considerable planning will be involved to develop and outline the material the Cheyenne most want to cover in terms of stories or legends. Many of the people involved are elderly and will have special needs.

The development and videotaping will take place around Lame Deer and will involve extensive collaborative efforts between the Lady Blackrobe Project, Cheyenne elders and educators, administration and staff at Dull Knife Memorial College (the tribal college), and the additional talent and resources of television station KUSM at Montana State University in Bozeman. The completed tapes are intended to serve both Indian and non-Indian populations throughout the state and will be broadcast over KUSM in Bozeman. They will also be made available for showing to the growing network of low-powered rural television stations in Montana, and through KOBL in Lame Deer. Additionally, copies of the tapes will be available through community outreach programs and in selected libraries across Montana. The videotaping is scheduled to take place during the summer of 1989.

A Centennial Ball was held July 3 in Lewistown, sponsored by the Fergus County Centennial '89ers. Costumes shown at right actually belonged to the great-aunt of Linda Majerus, center. Wanda Lucas, left, and Darlene Hodik, right, also wore dresses belonging to Linda's great-aunt.

Those attending the Ball (called "the social event of the century") wore costumes that were home made and rented, but many outfits were vintage clothing right from the attic—family heirlooms.



Best Costumes of the Centennial Ball were: Best Woman, Barb Knox (black dress); Best Man, Charlie Vaughn (carrying 75-year old mail pouch); Best Couples, Wes and Linda Gibbs (left), and Denise and Garland Goodwyn (right).



Central Montanans dressed in authentic dress took part in the Grand March of the Lewistown Centennial Ball.

Photos by Cindy Youde,  
Lewistown News Argus.

## MARIAS PASS MONUMENT MOVING

A monument to Theodore Roosevelt was moved July 17 from the center of Highway 2 at Marias Pass.

An area was set aside for spectators between 9 and 11 a.m. as the memorial was lifted slightly and wheeled on railroad tracks to its new location. A trench was dug so the foundation was moved along with the monument.

The 50-yard move took about an hour. Traffic was delayed as the Montana Highway Patrol directed traffic around the monument.

The monument was dedicated in 1930 to mark completion of the last link on U.S. Highway 2, the "Roosevelt International Highway," extending 4,060 miles from Portland, Maine to Portland, Oregon. More miles of the highway are in Montana—746 of them—than in any other state.

The 60-foot-high monument is an obelisk, a pillar tapering to a pyramid, made of concrete faced with granite. It honors Theodore Roosevelt's contributions to forest conservation.

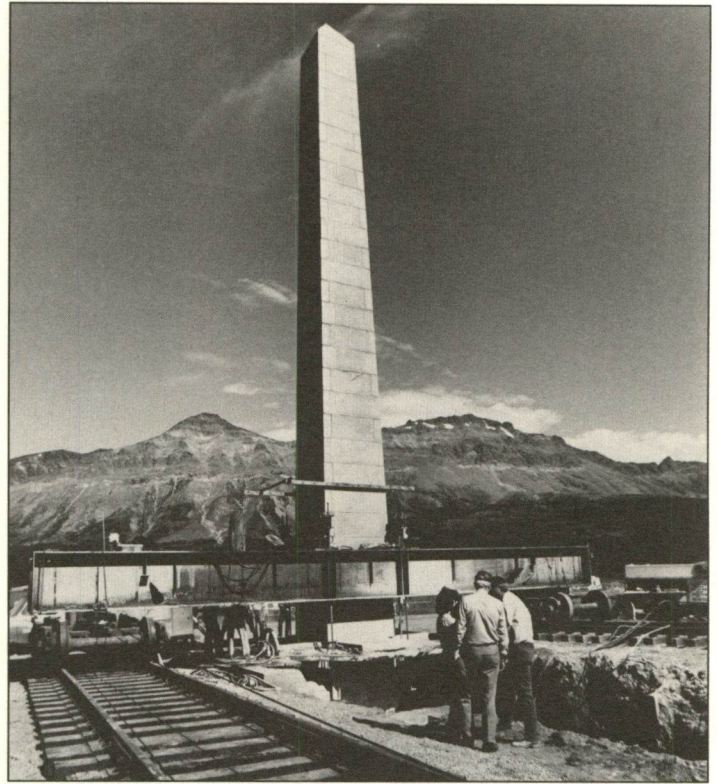
But seven of 13 traffic accidents at Marias Pass from 1979 to 1987 may have been related to the way traffic was routed around the monument, said Tim Love of the Lewis and Clark National Forest's Choteau office when the Forest Service announced plans to move the monument nearly three years ago.

The monument is being moved to the south side of the highway, where other monuments to "Slippery Bill" Morrison and John F. Stevens will be placed. Morrison was a colorful Marias Pass resident who donated the land where the Roosevelt Monument was placed.

A statue of Stevens, who discovered and then surveyed Marias Pass for the Great Northern Railway, has been restored by Browning sculptor Bob Scriver. Burlington Northern and the United Transportation Union paid for the restoration. The statue was formerly located across the Burlington Northern mainline near the Summit Depot.

A memorial to the Blackfeet may also be placed at the site.

Since 1985 the Forest Service, National Park Service, Montana Department of Highways, Montana Department of Fish, Wildlife and Parks, and the Blackfoot Tribe have worked cooperatively together to improve the safety considerations. A dedication service is planned for next summer. The project is a sanctioned Centennial project.



*Final preparations for moving the Theodore Roosevelt Memorial out of Highway 2 at Marias Pass July 19. The memorial is now 150 feet away in a square which will contain memorials to John Stevens, who surveyed Marias Pass for the Great Northern Railway, and "Slippery" Bill Morrison, who donated the land where the memorial was placed. (Bert Lindler Photo)*

## PACKHORSE RACE

The 6th Annual World Championship Packhorse Race will be held at McLeod, Saturday, August 26 beginning at 7:30 a.m. It is a sanctioned Centennial event which emphasizes the art and skill of horsemanship and packing. A record crowd is expected this year.

Those who enter compete against time, horsemanship and packing abilities in the old time method. Two men and three horses start in a small arena. The horses are slick to halter. The men must saddle two of the horses and pack the third with three sacks of horse cake and one dozen eggs. The pack will weigh 160 pounds, and the packers must have the job done in 10 minutes or they are eliminated from competition.

10 AUGUST

Next, the contestants must pack through two miles of mountainous terrain. Points are deducted from their score if any of the eggs are broken. There will be veterinarians along the way to check the horses very carefully. No horse abuse is permitted. This is not an endurance contest for horses, but a contest in horsemanship and packing.

There will be a calcutta, August 25, the day before the race, when spectators will have an opportunity to wager on the events.

The event is sponsored by the World Championship Pack Horse Race Association in Big Timber. Larry Lahren, the director, has said that white Montana started with pack horses.

Events are scheduled for women and youth.

## NBC WEATHERMAN, WILLARD SCOTT IN HELENA



*Willard Scott, surrounded by admirers. Left to right: John Radeck, KTVH; Gov. Stan Stephens; Scott; Helena Mayor Russ Ritter; and a group of boys and girls who got out of bed early in the morning for the occasion.*

Willard Scott, NBC's traveling weatherman was well received and seemed to enjoy himself immensely when he appeared in front of the Centennial floral display at the state capitol Friday, July 21 at 5 a.m. A crowd estimated at 500 greeted the popular broadcaster for the first segment, but before he was through, about 6:45 a.m., the crowd swelled to an estimated 1100. Four segments of the show were aired on national television, and viewed by an estimated nine million people.

Scott appeared in Centennial dress, and refereed a mock argument between

Marcus Daly and William Clark, copper kings, over the location of the state capital, Anaconda vs. Helena.

Scott was also purified in an Indian ceremony performed by Eddie Barbeau. When informed that it was a purification ceremony, Scott remarked, "I need that." Wagonmaster Keith Horne was interviewed by Scott, as were many others who came forward to greet him. Governor Stan Stephens presented Scott with the official Centennial anthology, *The Last Best Place*. Stephens told Scott he was the greatest Centennial event of the day.

Not to be outdone by any politician, Scott toured the crowd, shaking hands with as many people as possible, even receiving kisses from some of the ladies.

He was also greeted by Helena Mayor Russ Ritter, who appeared on one of the four weather segments on NBC during the visit. Just before one of the segments, Scott lost his weather report. After searching his pockets diligently for the report, without success, he never lost his cool, and continued to be his natural, jovial self. He seemed to ad lib through it very nicely.



*Willard Scott smokes the peace pipe in purification ceremonies.*



*Governor Stan Stephens and Willard Scott exchange greetings when Scott visited Helena.*

---

## BALL OF THE CENTURY IN THE STATE CAPITOL

### *Historical Note:*

At 10:40 a.m. November 8, 1889, Governor Joseph K. Toole and other Territory political leaders received a telegram from President Benjamin Harrison that Montana's 20-year quest to be accepted into the Union was finally realized. Amid congratulatory cheers and general merry-making, Montana became the 41st state.

It was quickly suggested by political and community leaders that we should plan for a big ball to be held at Colonel Broadwater's newly opened Hotel and Natatorium; and build a temporary floor over the natatorium pool. This would ensure a large enough area for a celebration of this importance.

Although newspaper accounts are sketchy, apparently a crisis in our new state government resulted in the plans for the extravagant statehood celebrations being sidetracked and ultimately dropped.

However, plans are in the final stages for a Statehood Ball and Birthday Celebration to be held in the State Capitol on November 8, 1989. Yes, that's correct, for the first time ever, a ball and celebration will take place in the most appropriate and beautiful building in Montana, the Capitol.

Imagine if you will, people dressed in period gowns and evening coats arriving at the State Capitol in horse drawn carriages while fireworks are

lighting the sky on an adjacent hill.

It will truly be an opportunity to step back in time to relive the grandeur and excitement as Montanans were taking their rightful place in a robust and rapidly growing state full of adventure and opportunities for all.

The first floor of the Capitol will be decorated in a "Broadwater Natatorium" theme with an abundance of plants and trellises. The space will primarily serve as a lounge area with plenty of tables and chairs, where one can get refreshments and visit with neighbors and friends.

Of course, the focal point will be in the rotunda area and adjoining hallways which will serve as the ballroom for the evening. People will be able to look down from the decorated balconies as ladies in elegant Victorian gowns and men in formal coats dance to music by the Helena Big Band.

Then if there is a desire for quieter moments, people can adjourn to the beautiful Governor's reception room and visit with friends over the sounds of chamber music in the background.

The third floor of the Capitol has four major rooms that may be utilized for the celebration.

In the House Chambers, a "Centennial Harmony" will be performed by Rob Quist and Jack Gladston accompanied by the Great Northern Band. Onlookers will be able to sit in the bal-

conies, rest their feet and enjoy the music before moving over to the Senate Chamber to listen to the Montana Chorale performance.

Retreating to the east side of the Rotunda, musical activities are planned for both the Old Supreme Court Chambers and the Old Senate Library area.

Elected public officials will be asked to participate, and where appropriate, open their offices to greet the public.

As you can see, this event is more than just a ball. It truly is a "once in a lifetime" celebration that will provide a variety of entertainment, including dancing. Surely it will be one that you won't want to miss.

Plans are that tickets for the Centennial Ball and Reception will be made available locally beginning around the Labor Day weekend. Ticket costs will be \$12.50 per individual or \$25 per couple. Watch for announcements in your local newspaper regarding the location and contact person to acquire tickets in your area.

So mark your calendar for Wednesday, November 8th, 1989 and we'll see you at the State Capitol in Helena for the Celebration of the Century as we are ushering out a most successful Centennial Year.

For further information, contact Keith Kelly, Capital City '89ers at 442-4120.

---

## RED EYE AGAIN

"Gimme a shot of red eye," drawled the tall, handsome stranger, the hero of a thousand westerns. The bartender's hand trembled as he poured. Here was an hombre to be reckoned with.

The scene of this melodrama is not Montana Territory in the 1880s. It's Montana today. And as everyone knows, there's no shortage of tall, handsome heroes in Montana. But finally, after all these years, our Montana heroes (or heroines) can once again enjoy a shot of red eye at their favorite saloon.

Old Montana Red Eye, an Official Centennial Whiskey, is now available in state liquor stores. The 100-proof, six-year-old, straight Bourbon Whiskey is distributed by Montana Distillers of Helena.

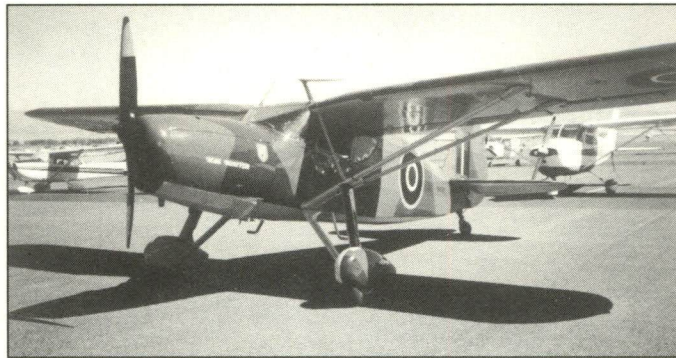
The Red Eye retails for \$15 a bottle, with \$1.40 of each sale going to the Montana Centennial Office to be used to offset costs of the Statehood Centennial Celebration.

For more information, please contact a Montana State Liquor Store or the Centennial Office at 444-1989.



## ANTIQUÉ AIRCRAFT ASSOCIATION ATTENDS BIG SKY DAY

Under the auspices of the Malmstrom Historical Foundation, the Montana Antique Aircraft Association brought eight antique aircraft to Great Falls for the Centennial Parade and Big Sky Day. These aircraft flew over the parade and landed at Malmstrom AFB where they were observed on the ground. All of the aircraft were built before 1947 and the oldest was manufactured in 1929. The aircraft and sponsors follow:



One of the eight antique aircraft that took part in the fly-over of the Montana Centennial parade in Great Falls July 22.

Aircraft	Sponsor	Owner
1929 Kari-Keen	McCullom RV's & Kaufmans Menswear	Frank E. Bass Moore, MT
1932 Fleet Bi-plane	Cellular One	Wayne Edsall Bozeman, MT
1942 Stearman PT 17	Sports City Cyclery	John Brennan Darby, MT
1943 Tiger Moth	First Liberty C. U.	Bud Hall Bozeman, MT
1944 Staggerwing Beech	Rice Motors	Lindey Lindemer Seeley Lake, MT
1945 J 3 Piper Cub	Great Falls Gas Co. & Montana Power Co.	Lisle Wood Butte, MT
1946 MK III "Argus"	Sletten Construction Co. & Devine & Asseltine	Mike Mulronev Helena, MT
1946 Fairchild 24	Brown & Williamson Tobacco Corp.	Ray Sanders Kalispell, MT

## CENTENNIAL COMMEMORATIVE TREE PROJECT

"Improve Montana, Plant a Centennial Commemorative Tree" has been described by Montana Centennial Executive Director Leo Ellingson as a lasting legacy, and he urged Centennial committees all over Montana to support the project. The remarks were made at a meeting held in Helena July 12. Ellingson spoke of a similar project in North Dakota which has been underway for three years. The North Dakota plan calls for planting 100 million trees and shrubs by the year 2000. Buckshot Hofner, who is the North Dakota Centennial Executive Director, is happy to see Montana is also interested in such a project and has offered to come to Montana and give Montana the benefit of experience they have gained over the three years the program has been underway in North Dakota.

Ellingson spoke of the grass roots nature of the Centennial organization in Montana, and asked, "When the Centennial celebration is over, where is the legacy?" If the Centennial enthusiasm could be extended to a 10-year

tree-planting project, the legacy would be apparent for years, perhaps centuries to come.

Walter Anderson, temporary chairman of Improve Montana, Plant a Centennial Tree project called and presided over the meeting which was attended by representatives of the Centennial, University of Montana, Department of Fish, Wildlife and Parks, Department of Agriculture, City of Helena, U.S. Forest Service, Montana State University, Garden Clubs, Department of State Lands and others.

Anderson spoke of the loss of trees in the past year due to fires, dry years, and devastating winters, and he asked every segment of society to get involved in planting trees during the next 10 years. He mentioned Arbor Day, school class reunions, graduations and other times when the commemorative trees might be planted.

At this time there is no state funding available for the project, but it was pointed out that the Montana Centennial has the lowest budget of any of the

states observing Centennials this year. In spite of this, the grass roots people of Montana have made the Centennial a tremendous success. If planting a commemorative tree can receive similar support over the next 10 years, the project will also be a tremendous success.

Roger Bergmeier, Chief Nursery and Grounds Bureau of the Forestry Division of the Department of State Lands said one-third of the schools participated in a project to plant Ponderosa Pines, and he said this program could probably be expanded. He offered technical support. George Evans of the Montana State University Department of Plant and Soil Science, also offered technical assistance, as did others present who have had experience in tree planting projects. All of these could be included in Improve Montana, Plant a Commemorative Centennial Tree.

---

## AREA CHURCH HISTORIES PUBLISHED

Mondak '89ers have published a booklet containing brief histories of some two dozen churches in the Richland County, Montana area. Many of the churches are pictured in the interesting booklet. It also includes the order of service for the Richland County ecumenical worship service held on June 25.

The interesting histories tell of immigrants who started the churches, some of the charter members. Some of the churches held services in languages other than English. Early day worship services were held in community halls, school class rooms, private homes, wherever they could meet. One group met in the Post Office. Often services were held every other week.

One church of a four-point parish notes that the pastor's salary was \$500.00 per year. Times have changed. There are stories of building funds which started with the ladies serving suppers at 25 cents per plate. Some of the churches have changed denominations down through the years, but have never discontinued holding worship services.

"We also do super-natural house calls," one church history states.

One interesting story tells of the early days in the Lonsdale United Methodist church. The tiny congregation decided to build their own church in the fall of 1899 on two acres of land. Cost of the church was \$1,290.75. Finished in the fall of 1900, the stone church was dedicated May 19, 1901 free of debt, though 1900 was the driest year in the history of the Yellowstone valley.

Following are excerpts from the dedication of the book.

The brief histories of the various Christian Churches herein do little to speak of the tremendous impact that Christianity has had on the settling of the Richland County area. The effect of a person's faith

surfaces in an area in oft-times subtle ways, eventually reflecting itself in a community's spirit, a community's values, a community's character. And most times, chronicling when church buildings were erected, misses the real impact of a community's faith.

A lesson we can all still learn from our ancestors who homesteaded this area and rooted our Christian faith herein: The Church was not for them so much a building, as it was a spirit that lived within them. They brought 'church' with them as they struggled to the area through dust storms and heat...as they rocked a sick child late into the night knowing there was no medical help to be found...through the lean beginnings, and the good years that put away forever thoughts of moving on. They were—each of them—the Church, long before any denomination called a minister, built an edifice, or formed a congregation, great or small.

Today, years later, we carry on in that same spirit, nurturing the same truths, struggling to pass on the same faith to our children, calling upon the same God to help us as did our ancestors. May we, in our time, be sensitive caretakers of the precious gift of faith we have received from our God and our ancestors.

This Centennial Booklet is dedicated to all people of faith in Richland County and especially to the thousands of people who have played a part in keeping the Christian heritage of faith alive. This Centennial Year we thank all the denominations that submitted a short history to be included herein and to all who helped with the Centennial Ecumenical Prayer Celebration.

---

## ST. XAVIER HISTORY RELEASED

St. Xavier, Montana has completed a Centennial project that will be a legacy. It is a 336 page book entitled *Time Never Ending*. Compiled by Esther Kehler, the hard bound book contains history of the community in Big Horn County.

It contains histories, stories from the past, pictures, mostly people, but also of scenery and events, including wagons, cars and equipment of the past. There are nearly 1,000 pictures in the book, and anyone familiar with the area and its people will be amazed with the contents of the book and the quality of the reproductions.

Included are such things as old time weddings of prominent people, newspaper clippings of historical events, St. Xavier Catholic Mission history, St. John's Lutheran Church history, cattle brands, family histories, school histories, early day farming and ranching, a history of irrigation in the area, as well as several pages devoted to Yellowtail Dam. School

teachers, their times and places are listed. The sugar beet industry is described. There is a section devoted to military veterans of the area, and another section devoted to "Friends of St. Xavier," the Crow Indians.

And in the back is a place for keeping records of the individual family tree.

It is truly a remarkable accomplishment, one of which the entire community of St. Xavier can be proud.

---

## TAPE SERIES TO AIR

"Wagons West," a series of 50 tapes of five minutes each, will supply music for Montana's Centennial to radio stations around the state. This Centennial non-profit project is a sanctioned project of Ullman Eye Clinic. The tapes are described as great music, excellent narration and just plain enjoyable listening. The narration describes the trek of the pioneers to Montana.

# CENTENNIAL • CALENDAR

## SEPTEMBER

	Miles City	Miles Community College Anniversary	232-2890
1-10/1	Dillon	Old Book/Manuscript Display	683-5027
1 - 3	Roundup	Cattle Drive Celebration	323-2762
1 - 10/12	Butte	Wildlife Exhibit	494-5595
1 - 4	Roundup	Post Office Celebration	323-2762
2	Virginia City	Fall Horseback Poker Ride	843-5341
2 - 3	Lincoln	Craft Sale	362-4485
2 - 3	Forsyth	Endurance Horse Race	356-2233
2 - 3	Bridger	Fromberg Cent. Labor Day Celebration	662-3334
2 - 3	Lincoln	Celebration Lecture Series	362-4485
2 - 4	Helmville	Rodeo	793-5672
2 - 4	White Sulpher Spgs	Meagher Co. Labor Day Rodeo	542-3918
3 - 10/1	Dillon	Manuscript & Old Book Display	683-5027
3	Dillon	J.C. Rodeo	683-2305
4	Lincoln	History Series & Celebration	362-4485
4	Dillon	Labor Day Parade	683-2305
4 - 9	Roundup-Billings	Great MT Cent. Cattle Drive	265-4383
5 - 9	Circle	Camera Club Photo Show	485-2414
8 - 9	Billings	Exposition	245-4111
8 -10	Lincoln	Corvette Rally	362-4485
8 -10	Bigfork	Cent. Golf Tournament	837-5641
9	Polson	Art Auction	883-9454
9	Circle	Town & Country Day	485-2414
9	Baker	Time Capsule Closing	778-2074
9	Butte	Natl Assn. of Letter Carriers First Issue Stamp Pictorial	494-2107
9 -10	Choteau	Threshing Bee	466-2849
9 -10	St. Regis	Flea Market Rendezvous	
9 -10	Roundup	Horse Endurance Ride	323-2762
10	Forsyth	Buffalo Rifle Shoot	356-2233
10	Bridger	Bridger Cent. Rodeo	662-3216
10	Billings	Railroad Show	373-6429
15	Missoula	Classical Dance Drama Of Indian America	543-6623
15-17	Libby	Nordicfest	293-3391
15-17	Hamilton	State 4-H Horse Show	363-2044
16	Lincoln	Fall Ball Tournament	362-4485
16	St. Ignatious	Day for Friendship Mass/Pow-Wow/Chuckwagon BBQ	745-4119
16	Baker	X1 Alpha Nu Fall Festival	
16	Gold Creek	Eastern Star 75th Anniversary	778-3149
16	Dillon	Centennial Jamboree	
16	Circle	Barrett-Peterson Memorial Trap Shoot	683-4923
16 - 17	Missoula	Richey Festival	485-2414
		Centennial Heritage Festival-Caras Park	543-6623

16 - 17	Missoula	International Days-Southgate Mall & City-wide	543-6623
21-23	Bozeman	South Montana Angus Tour	587-0543
21-24	Laurel	Herbstfest	628-6587
29-10/1	Great Falls	Octoberfest	452-9992
24	Helmville	Turkey Shoot	
24	Bridger	Family Fun Day	662-3387
27	Libby	Cent. Time Capsule Placement	662-3216
28-30	Chester	W.I.F.E. Convention	292-3524
29-30	Butte	Computer Fair	496-4460
29-11/10	Dillon	Western MT College Fund Drive	683-5511
30	Lincoln	Car Auction	362-4485

## OCTOBER

	Miles City	Harvest Festival	232-2890
1	Circle	9th Annual Rattlesnake & Rocky Mtn. Oyster Feed	485-2414
5	Fort Harrison	Veterans Salute to Montana	442-6410
5-7	Lewistown	MT China Painting Convention	538-7347
6	Butte	6th Annual KNOW Seminar-"Women in Montana's History"	723-9101
7	Helena	Centennial Auction	442-4120
12	Billings	American Dance Theater	259-2060
12 - 14	Butte	Tour of Historical Industrial Sites	723-4387
14	Havre	Ag & Ranching in West	265-4383
14	Helena	Military & Civilian Centennial Ball	442-4120
13	Helena	Classical Amer. Indian Dance	443-0287
14-15	Glendive	Style Show	365-5601
15-17	Butte	Art Show, Painting	494-4069
16-17	Havre	Chippewa Cree of Rocky Boy Reservation Annual Council Treaty Conference	295-4355
21	Lincoln	Hunter's Stew	362-4485
24	Great Falls	Cent. Concert, G.F. Symphony	453-4102
29	Glendive	Historic Homes Tour	365-5601
31	Lincoln	P.T.A. Carnival	362-4485
	Dillon	Western MT College Homecoming	
	Harlem	Play/Centennial Monument	352-2201

---

Montana Statehood Centennial Office  
P.O. Box 1989, Capitol Station  
Helena, MT 59620



*The Centennial Wagon Train  
Arrives in Helena*



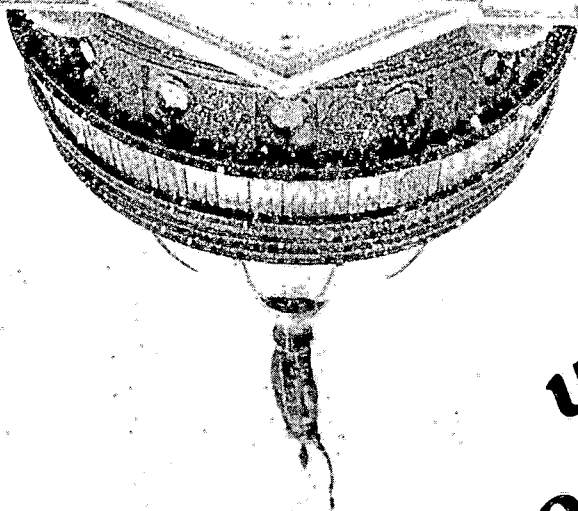
*The Centennial Float in the  
Official Centennial Parade  
in Great Falls*

---

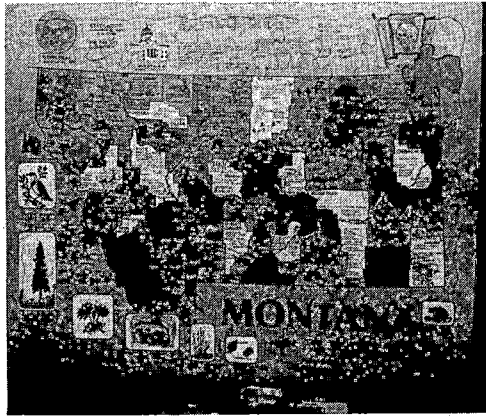
**Official  
Products**



**Commemorative  
Edition**



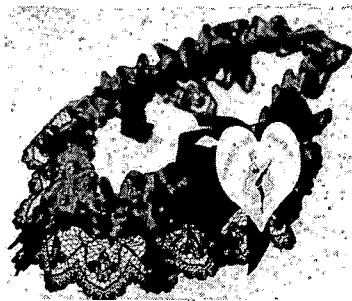
**Montana Trivia Jigsaw Puzzle.** Colorful 100 pieces, teaches Montana History to all ages. Shown: Counties, County Seats, Rivers, Flag, State Bird, Tree, Animal and more. (\$7.50 plus \$2.50 shipping.) From **Puzzles, Missoulian, P.O. Box 8029, Missoula MT 59807.**



**Centennial Commemorative Medals.** Limited to number minted on or before 12/31/89. Designed by Montana artist Frank Hagel, each medal shows historic theme and Montana animal. Individual Medals in **Bronze: \$12.50 ea.** plus \$3 postage. Set of 5 in Walnut Case: **\$105** plus \$8 postage.

Individual Medals in one troy oz, .999 fine **Silver: \$30** plus \$5 postage. Set of 5 in Presentation Case: **\$190** plus \$10 postage.

**Single Gold Medal:** "The Gold Panner." Only Gold Medal in series. Two sizes: 1 oz. .999 Gold: **\$850** plus \$15 postage. 1/4 oz. .999 gold: **\$195** plus \$10 postage. Medals from **Centennial '89 Inc., P.O. Box 8900, Helena MT 59604.** (406) 443-2883 or 449-4881. Visa/MC.



**Centennial Garter.**

As worn by Grizzly Peak-A-Boos, popular Red Lodge Can-Can group. \$3 each plus postage. Proceeds underwrite Can Can Revival and Performing Arts Scholarship Fund. From **Grizzly Peak-A-Boos, P.O. Box 934, Red Lodge MT 59068.** (406) 446-3132.



**Centennial Buckle.**

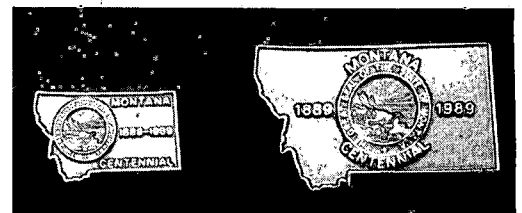
Limited Edition (7500). Silver Plate buckle available w/any of above; Bronze Medals: **\$80** plus \$4 per for postage. Also in Sterling Silver w/any Silver Medal (above): **\$300** plus \$10 per for postage, etc. From **Centennial '89 Inc., P.O. Box 8900, Helena MT 59604.** (406) 443-2883 or 449-4881. Visa/MC.



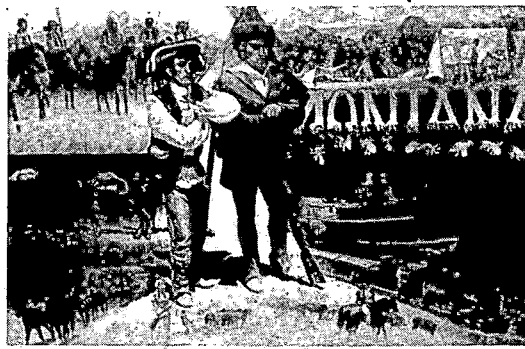
**Official Airline of the Montana Centennial.**

**Centennial Lapel Pins:**

Two Sizes (1/2" or 1") in Sterling Silver (**\$25**), Gold Plate (**\$22.50**) or Bronze (**\$20**). Add \$2 postage. From **Centennial '89, P.O. Box 8900, Helena MT 59604.** (406) 443-2883 or 449-4881. Visa/MC.



**Print: "The Heritage of Montana - The Governor's Edition"** by artist Gary Carter. Limited Edition (1989). Image size: 20" x 30", each print personally inspected by artist & signed in pencil by Montana Governors Stephens, Schwinden, Judge, Anderson, Babcock. \$250 plus \$10 postage. From **Centennial '89, P.O. Box 8900, Helena MT 59604.** (406) 443-2883 or 449-4881. Visa/MC.



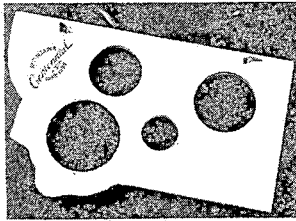
**Gold Pan & Flat Pins & Badges.**

Copper Gold Pan w/Blue state shape and Yellow letters. 2 sizes: 2 3/4" (\$7.95) & 4 3/8" (\$9.95).

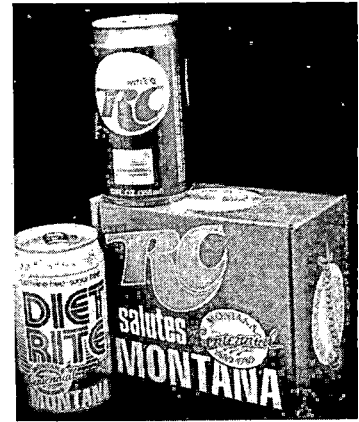
**Pins** in Plastic Blue state shape w/yellow letters, Gold Nugget at capitol city. Also badge size (3 1/2"). Your name put on (optional). Large size (w/nugget \$6.95; w/o nugget \$4.50). Small state (w/nugget \$4.50, w/o nugget \$4.17). From **Montana Engraving & Laminating, 6312 Hwy 12 W., Helena MT 59601.**



**Spaghetti Measure.** \$4.95 from **Montana Marketing 5440 MT 35 KALISPELL MT 59901.**



**Centennial RC Cola.** Collector's Edition (8 different Centennial Cans). The Official Centennial Cola. A Centennial Contribution is made to help fund Centennial Events for each can of RC and Diet Rite you buy. For Fund Raisers, too! See Participating Stores for details.

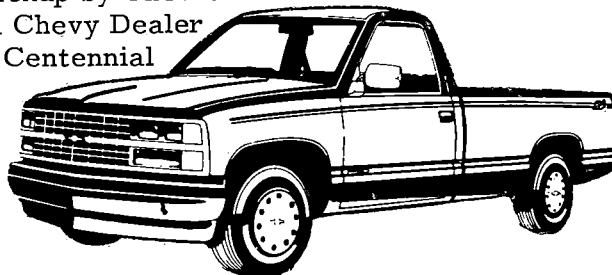


**Bright Waters: A Montana Reflection.** Signed Color Print (16"x20") of Montana Wilderness and ten page Booklet describing fishing and bear encounters in Bob Marshall Wilderness. (\$12) from **Howard Zankner, 1125 Michaels Lane, Billings MT 59105.**

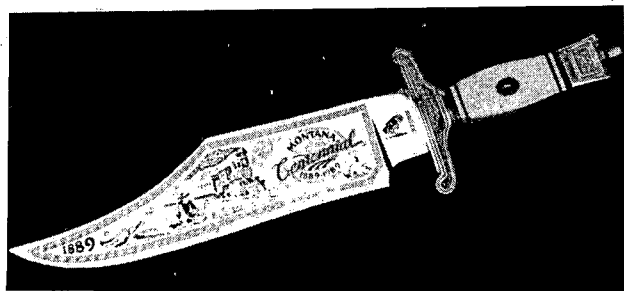
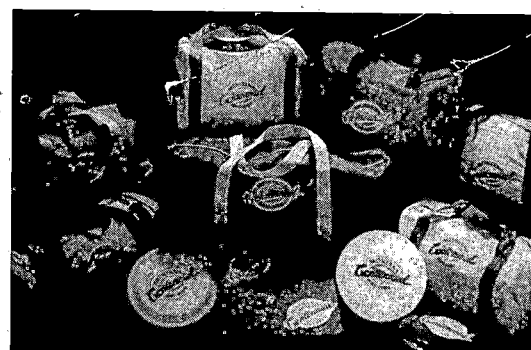
**Centennial Model Truck.** Semi-Van in 1/64 scale w/logo. Retail: \$17.50 from **Karen Fast, SR 266, Box 9, Frazer MT 59225.** (406) 392-5722 or **Culbertson Supply, Culbertson MT 59218.** (406) 787-6211.



**Chevy Pickup, Special Centennial Edition.** Catch the Centennial Spirit in the 1989 Full-Size Pickup by Chevrolet. See your local Montana Chevy Dealer for a test drive. Go in Centennial Style!

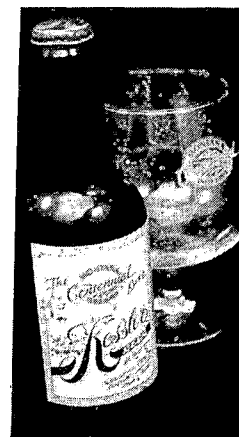


**Centennial Meadow Gold Dairy Products.** Official Dairy Products of Montana's Centennial. Montana Fresh. **Meadow Gold** also sponsors The Centennial Youth Exchange Program.

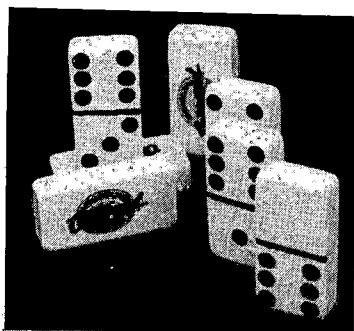


**Commemorative Numbered Bowie Knives.** Limited Edition (20). Gold Gilding-Etched Stainless Steel Blade with Ivory Grips, Inlaid Garnets, Buffalo Horn Spacers. Suede-lined purple heart display case with Montana map, remarked border. Price on request. From **Bronk's Custom Knives, Box 746, White Sulphur Springs MT 59645.** (406) 547-3897 or **James Knight, Box 362, White Sulphur Springs MT 59645.** (406) 547-3782.

**Centennial Bags.** 9x17 Barrel (\$18.95), 12x24 Barrel (\$29.95), Ski Boot Bag (\$27.95), Gym Bag (\$29.95). 12x12 Stadium Cushion (\$7.,95). Many other styles, too. "Centennial Flyer" Frisbee (\$3.95). Have a fling! Bags high quality Denier 400 Nylon in Yellow, Gold, Lt. Blue, Gray, Royal Blue. Quantity Discounts. From **Weber Unlimited Inc., 2450 HY 93 S., Kalispell MT 59901.** (406) 752-3556.



**Kessler Centennial Beer.** Pure & Natural from the Montana Brewery with the historic name.



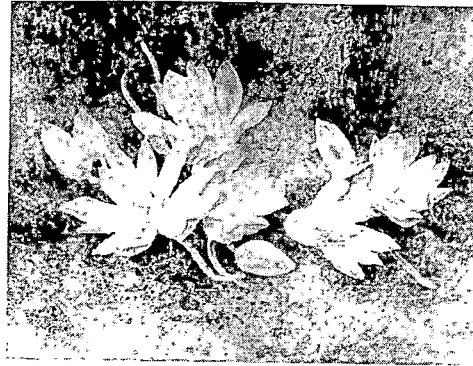
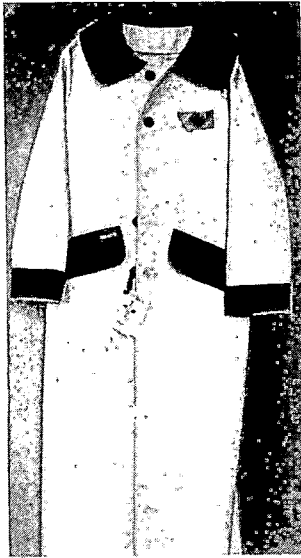
**Centennial Dominoes.** 28 Pieces. Fine Dominoes w/full-color Centennial logo in 3/8" thick Polyester Marble Resin polished to resemble Ivory. Learn to play this internationally popular game. Instruction Book Included. Fun for All Ages! (\$21.95 plus \$2.50 shipping.) From **Centennial Dominoes, 11522 Gee-Norman Road, Belgrade MT 59714.** (406) 388-0142.



**Centennial Medallions.** Exclusive Design. 2" diameter in solid Bronze or Pewter (\$12), Sterling Silver (\$90). Also in solid Montana Copper (\$25) and solid Bronze plated in 24K Gold (\$20). Limited Edition (1000) Sets of 3 medallions (Bronze, Copper, Bronze w/Gold Plate) in Walnut Case (\$70). Write/call for nearest dealer to **Double Cabin Trading Co., P.O. Box 249, Victor MT 59875.** (406) 961-4188.

### Centennial T-Shirts and Sportswear.

Original Montana Centennial Designs w/Centennial logo, or logo alone. Many styles. Available in stores statewide. For catalog/price list: Lake Town T-Shirts, 901 Wisconsin Avenue, Whitefish MT 59937. (800) 272-8337.



### Watercolor Print:

#### "The Bitterroot"

Montana's State Flower. Limited Edition (1800).

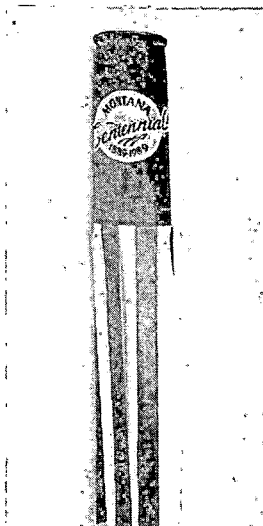
Size 11½"x14" \$40.

At galleries or from Jean Halverson, 405 N. Park Drive #7C, Great Falls MT 59401.

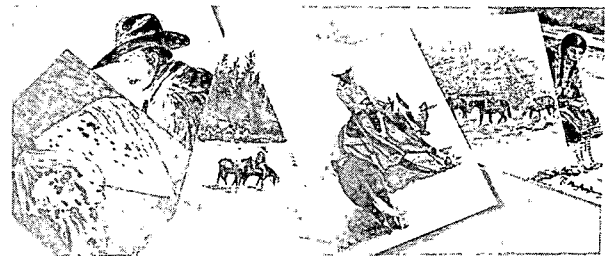


### Centennial Duster &

**Cowboy Coat.** Faithful reproduction of dusters found in Russell paintings, tailored for contemporary cowboy. Coat is shorter version of duster. Both in heavy 13 oz. 100% Cotton Canvas Duck. Can be trimmed in Leather or Corduroy. Water Repellent. **Prices:** Duster: \$135 plus \$5 postage. Coat: \$89.95. From Country Creations, P.O. Box 148, Victor MT 59875. (406) 642-3751.



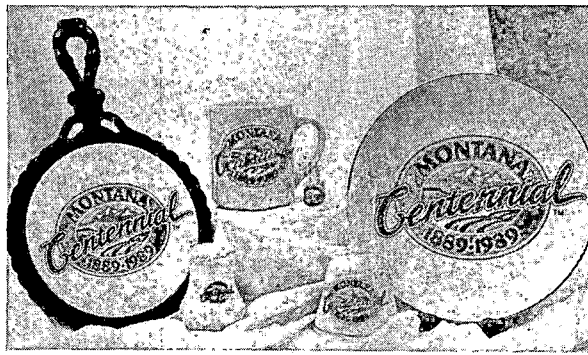
**Centennial Wind Sock.** Two sizes: 45" (\$22.95) and 15" (\$5.95). Large size: Blue Body w/Blue & White Streamers and 4-color Centennial logo. Small: White Body w/White & Blue or Red, White & Blue Streamers; Blue Body w/White & Blue or Blue & Yellow Streamers. Fly it with Pride! Available at Montana stores or from Win-Soc, P.O. Box 1321, Red Lodge MT 59068. (406) 446-1138.



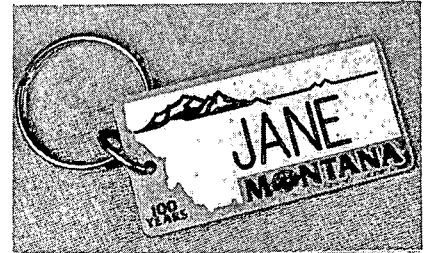
**Montana Note Cards.** 6 Original Watercolors by Mary Ann Barrington printed in Black & White on rich, heavy notepaper, envelopes included. (\$3 per pack of 6, plus shipping.) Special orders of one card available on request. From Wrabl'n Ranch, Mary Ann Barrington, 3453 Eastside Hwy., Stevensville MT 59870. (406) 777-3459 (evenings).

**Fine Porcelain.** Plates, Mugs, Candy Dish, Bell, Thimble, Salt & Pepper, Wrought Iron & Wood Mounted Tiles, Dust Pan, Cup & Saucer.

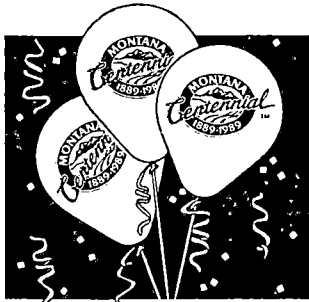
**Collector's Plates and Mugs.** Montana Historical Series. Limited Edition. Fine China. 8 original montage scenes of Montana History by artist Tom Saubert. Titles: "Rivers, Furs, Mountains and Men" (shown); "Children of the Buffalo," "Cowboys," "Prospectors," "Homesteaders," "Copper Kings," "Loggers," "Farmers & Ranchers." From **Shining Mountain Collectibles**, P.O. Box 878, Kalispell MT 59903. (406) 752-8504 or (800) 327-6106.



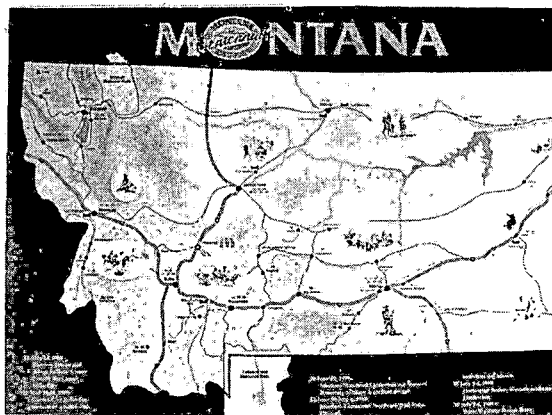
**Keyrings.** In shape of Centennial License Plate. At stores or from **Great Western Plate Co.**, P.O. Box 238, Payson UT 84651. (800) 262-5394.



**Canyon Wedding Chapel.** Have a Centennial Wedding! Renew your Vows! Nostalgic Old West Weddings in Country Setting. Horse Drawn Buggy, Centennial Dress, Centennial Wedding Certificate. Only 5 miles south of Red Lodge. **Canyon Wedding Chapel**, Box 605, Red Lodge MT 59068. (406) 446-2681.



**Balloons.** Rainbow Colors. 11" Helium Quality. For Parties, Fund Raisers, All Centennial Birthday Events. \$3.50 per dozen, \$35 per gross. From **Balloons, Etc.**, Lundy Center, Helena MT 59601 (406) 449-8485.



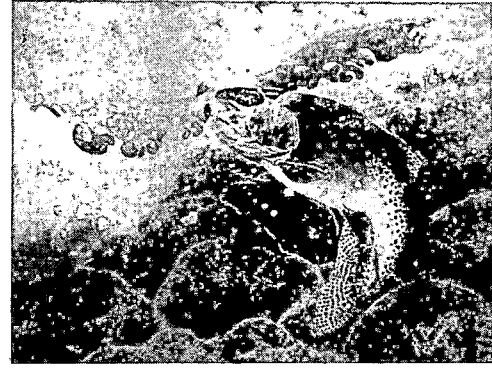
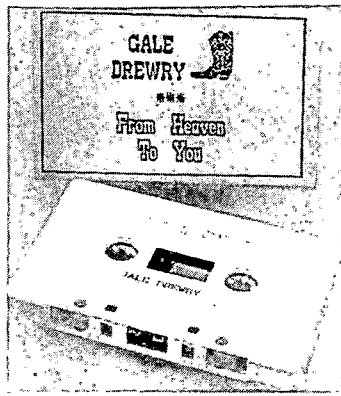
**Centennial Jacket.** Royal Blue Oxford Nylon w/4-color logo (Screened \$49.95) (Embroidered \$79.95). From **Eagle Athletic**, 724 6th Street NW, Great Falls MT 59404.



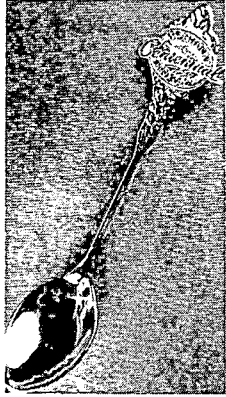
**Framed Embroidered Logo**, over 50,000 stitches, oak frame, \$185 plus postage from **Centennial Embroidered Plaques**, P.O. Box 50883, Billings MT 59101.

**Centennial Events Map.** Full Color 14"x22" Montana Map w/locations & dates of major Centennial Events. Illustrated w/photos/artwork by 5 Montana artists. \$1.95 plus 60¢ postage. From **Treasure State Maps**, 1242 N. 28th Street, Suite 240, Billings MT 59101. (406) 259-7887.

**"From Heaven to You."** Cassette Tape of Original Montana Songs by Gale Drewry, including "I Love Montana" and other country/western originals. Vocals accompanied by Piano, Fiddle, Guitar, Bass, Drums, Harmonica, etc. (\$9.) From Gale Drewry, Box 174, Lambert MT 59243. (406) 774-3480.



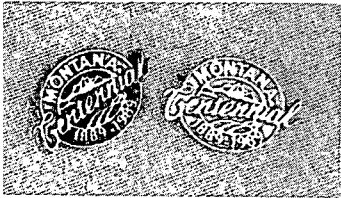
**"Yellowstone Heritage."** Watercolor Print by Rich Stevenson. Yellowstone Cutthroat Trout, Montana's State Fish, shown feeding on caddisfly hatch. Signed, Numbered, Limited Edition (250). Archival Quality Paper. Size 12"x16". Prints remarqued w/original watercolor of trout fly. Framed. (\$150 plus \$5 shipping.) From Holton's of Helena, Ltd., 1219 11th Avenue, Helena MT 59601. (406) 442-3688. Visa/MC.



**Collector's Spoon.** Silver Plated w/Centennial logo in full color. (\$4.50). (800) 292-1989



**Centennial Pencils.** For Fundraising, Giveaways, Schools, Groups. All Quantities Available. Logo. One color imprint: 19¢ each in quantities of 1,000. 3-color logo imprint: \$125 for 500, \$225 for 1,000. Plus shipping. From Quality Promotional Products, P.O. Box 1255, Helena MT 59624. (406) 442-9440.



**Centennial Pins.** Logo in Copper, Pewter, Gold Tone (\$9.95). Silver (\$14.95). (800) 292-1989

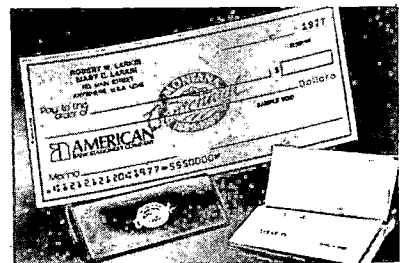
**Belt Buckles.** Limited Edition of 3000. Series of 6: Eagle & Buffalo (shown), Elk, Deer, Bear, Trout. Pewter, Bronze or Sterling Silver. For dealer near you: 800-292-1989



**Centennial Boot.** Limited Edition (500 pairs). Individually Handmade for you. Sizes: 5 - 13, B - EEE, wide & half. (\$500 pair plus shipping). By special order only from Bowman's Wilson Boot Company, 110 E. Callender Street, Dept. 1989, Livingston MT 59047. (406) 222-3842.



**Centennial Checks and Check Covers.** Available at Montana Credit Unions that offer members Share Draft Accounts. Checks: Gray w/Wine Border. Vinyl Covers in Wine with Gold logo. At Montana Credit Unions.



*The products in this catalog have been OFFICIALLY SANCTIONED BY THE MONTANA CENTENNIAL COMMISSION. They represent an exceptional selection of collector's items, memorabilia and merchandise especially produced for Montana's 100th birthday. Many stores in Montana carry these products. A portion of proceeds helps to fund Centennial activities statewide. Dealer inquiries invited. Contact individual vendors for information. (Centennial Commission & Office not responsible for any changes made by vendors after publication of catalog.)*

---

## **New Products**

**Centennial Buttons** (round & oval w/color logo on white. **Centennial Pens.** Executive & Ballpoint styles. From **Quality Promotional Products**, P.O. Box 1255, Helena MT 59624.

**Songs.** "M 89" & "100 Years" by Mary Montana. From **Centennial Songs**, Box 33, Roundup MT 59072.

**First Day Cover w/Centennial Cache.** From **Robert J. Werner**, 1004 N. Davis, Helena MT 59601.

**Sun Shades.** For Cars, Pickups, Vans. From **Jordan Distributing**, 317 Ecton Circle, Billings MT 59105.

**Old Fashioned Photographs.** In Period Costumes, Sepia Toned. From **Sadie's Parlor**, Rimrock Mall, Billings MT 59102.

**Montana Wildflower & Centennial Note Cards.** By Ceil Rathbun on Parch-Tone Paper, Hand-painted Watercolors. From **Dezign by Ceil**, P.O. Box 169, Polson MT 59860.

**Bronze & Poster.** Bronze depicts Montana Cowboy and Woman. Poster: "Montana - Still Free" is 24"x34" depicting wild horses in Beartooth Mountains. From **Bill Rains**, P.O. Box 35500-500, Billings MT 59107.

**Silk Screening of T-Shirts, Bags, Towels, etc.,** w/Centennial Logo. From **The Shirt Depot**, 503 Somers Avenue, Whitefish MT 59937.

**Camera & Binocular Straps.** W/Centennial logo. From **OP/TECH**, 290 Arden Drive, Belgrade MT 59714.

**Solid Copper Medallion.** From **Double Cabin Trading Co**, P.O. Box 249, Victor MT 59875.

**Leatherwork.** Hand-tooled & carved w/Montana wildlife. Pictorials, Clocks, Checkbook Covers, Belts, Scabbards. From **Mountain View Leather**, P.O. Box 2763, Great Falls MT 59043.

**Napkins & Calendars** based on 1937 Montana material. From **D.L.G.B. Co.**, 2121 Masonic Home Rd., Helena MT 59601.

**Dolls.** Hand-made, Period Costumed, Signed, Numbered. From **Hansen's Hobby & Supplies**, 471 Mullan Trail, Gold Creek MT 59733.

**Ox-Yokes.** Redwood, 12" to 58" sizes, personalized. From **David Bruggeman**, P.O. Box 88443, Sioux Falls SD 57105.

**Magnets, Pins, Clocks, Thermometer.** From **Creations Unlimited**, P.O. Box 1050, Lansdale PA 19446.

**Model Tractor.** 1/16 die-cast metal replica of Oliver 70 Row Crop, ca. 1935-37. From **Ronald Goodman**, 3215 W. Main, Fargo ND 58103.

**Cassette.** 14 songs by Montana singer Deb Strohmeyer. From **Deb Strohmeyer**, 401 Reserve Road., Libby MT 59923.

**Serigraph.** Art piece on acrylic plastic. Framed. From **Greg Wilson**, 1063 1st Street NW, Columbia Falls MT 59912.

**Teddy Bears.** Fully jointed, 3 sizes w/music boxes. In denim or Indian costume. From **Sunrise Arts & Crafts**, P.O. Box 188, Grassy Butte ND 58634.

**Spur Straps.** Turn-of-Century style in #1 grade leather. From **Tracy Fruit**, P.O. Box 483, Broadus MT 59317.

**28-Year Calendar.** 11"x17" on quality paper. From **E. T. Publications**, 530 E. Second Street, Rexburg ID 83440.

**Pillow.** Limited edition (250), blue & white w/logo. From **Win-Soc**, P.O. Box 1321, Red Lodge MT 59068.

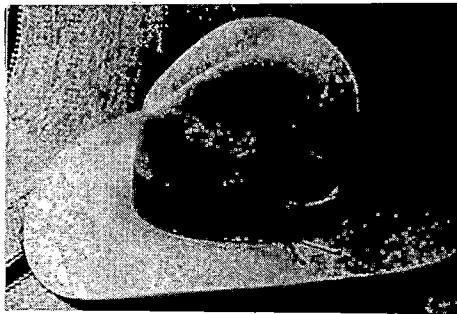
**Theatrical Equipment & Assistance.** From **Sunshine Productions**, 2015 Sixth Avenue N, Great Falls MT 59401.

**Catering.** For Centennial Events. From **C Cedric's Catering**, 3101 Russell Street, Missoula MT 59801.

**Centennial Savings Certificates.** From **State Capitol Employees Credit Union**, Helena.

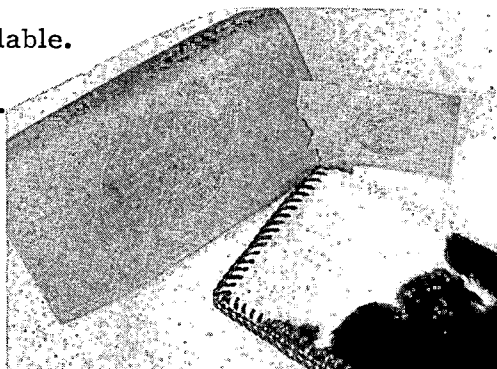
**Fireworks!!!** For your Centennial Events. From **Rasmak Display Fireworks Inc**, 310 Ice Pond Road, Bozeman MT 59715.

**Centennial Custom Cowboy Hat.** Limited Edition. 2 styles/2 colors (silver belly or black). Montana Crease (pictured) or Rancher Crease. Hand-crafted of 5X Beaver Felt, Leather Sweatband embossed with Gold. **(\$150)**. From **Kirkpatrick Custom Hatters, Box 114, Wisdom MT 59761. (406) 689-3630.**

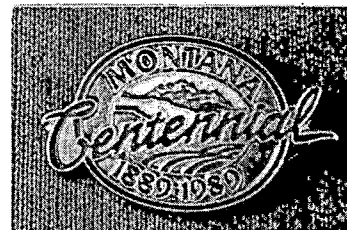


**Centennial Flags.** A "Must" for every home, office, event. Blue & White with colored logo. 4'x6' **(\$42)**. 3'x5' **(\$35)**. 12"x18" **(\$5)**. Add \$2 for shipping. From **Centennial Flag, P.O. Box 1989, Cut Bank MT 59427. (406) 873-4183.**

**Billfolds & Handcrafted Leather Goods.** Calfskin top or sidebound checks: sewn **(\$25)**; hand-laced **(\$35)**; top-stub checks: sewn **(\$32)**, hand-laced **(\$42)**. Leather Cover: sewn **(\$21.50)**, hand-laced **(\$31)**. 3/4" Hatband **(\$8)**. Montana Patch **(\$3)**. Lighter Covers, Belts, Buckles, Key Rings available. All with Centennial logo from **Wild Winds Leathercrafts, P.O. Box 4294, Helena MT 59604. (406) 458-9261. Visa/MC.**



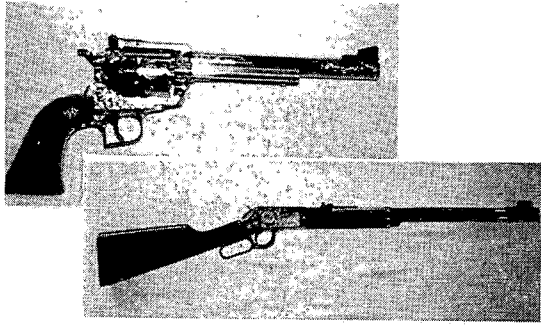
**Centennial Caps, Jackets, Patches.** Caps: Solid Corduroy, Corduroy Front/w/mesh back, Solid Twill **(\$11.95 ea.)**. Poly Front/w/mesh: **(\$9.95)**. Patches: 2 1/2"x4 1/2" for caps, uniforms, awards, etc. **(\$5.00)**. Jackets **(\$55.00)**. All from **The Monogrammer, 1710 Livingston, Helena MT 59601. (406) 449-4681.**



**Lapel Pins.** Two sizes: 3/4" gold plated and 1" cloisonne and display the Centennial logo in full color. These lapel pins are owned by the State and all profits are returned to help celebrate Montana's 100th Birthday. Suggested retail: **\$3**. Available statewide. For nearest source: **800-292-1989.**

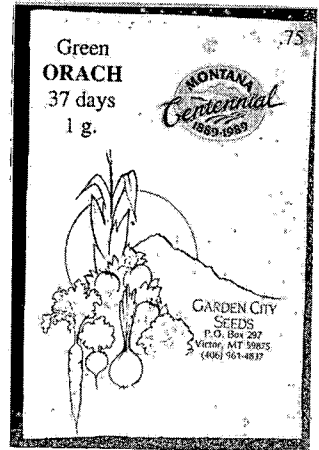


**Centennial Spurs.** Handcrafted, Numbered, Limited Edition (2000). One inch wide Bands, Hinged Buttons, Solid Brass Rowel, Hand-Pierced Sterling Silver Overlay, Hand Engraved State Emblem and Tip Silver. **(\$225 pair plus \$5 postage.)** Hardwood Display Base **(\$25 additional)**. From **Sweetwater Silversmith, P.O. Box 494, Browning MT 59417. (406) 338-5371.**

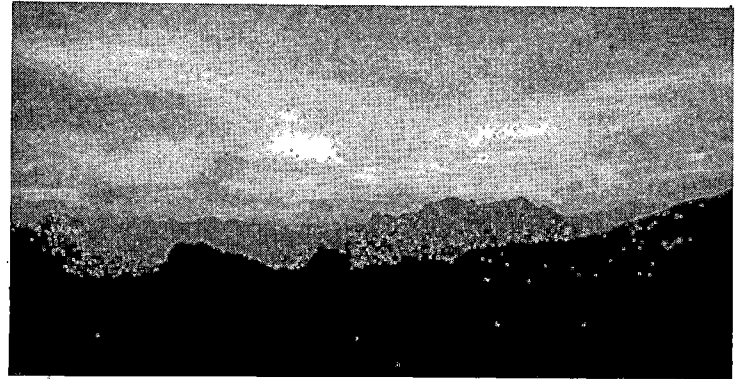


**Ruger Pistol & Winchester Rifle.** Engraved, Gold & Nickel Plated. Limited Edition (250 each). At Scheels Stores, Great Falls, Billings.

**Centennial Seed: Green Orach.** "Heirloom" Plant similar to Spinach, brought to Montana by early pioneers. Plant in your Centennial Garden! (75¢ per pkt. plus 50¢ shipping.) Hardy Seeds for the North from Garden City Seeds, Box 297, Victor MT 59875. (406) 961-4837.



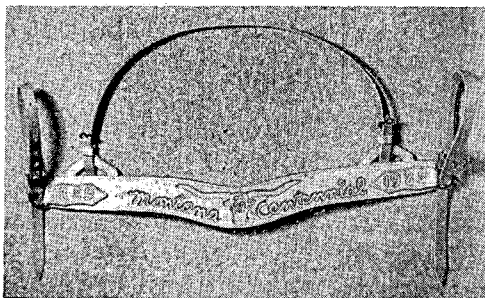
**Full-Color Centennial Commemorative Poster.** "Montana - Land of Beginnings," photography by Patrick Clark. 22"x32". Unsigned (\$20). Signed (\$30). From Land of Beginnings, Box 8461, Missoula MT 59807. (800) 628-2828 ext. 728. Visa/MC.



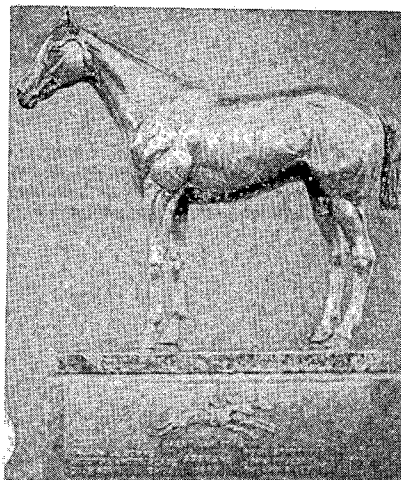
**Centennial Bandana.** 22" square, Cotton/Orlon, Montana Blue or Gold w/Centennial logo. (\$3 each plus 50¢ postage.) Proceeds benefit Historic Preservation Projects by Huntley Project Lions Club. From Huntley Project Lion's Club, Box 26, Ballantine MT 59006. (406) 967-3395.



**Centennial Wagon Train: Pin & Souvenir Book.** Pin features Centennial logo and words "Wagon Train" mounted on Horseshoe Nail. (\$5 plus 35¢ shipping.) Proceeds benefit Wagon Train Project. Souvenir Book will commemorate Wagon Train event, includes information on participants, route, schedule of events. (\$5 plus 75¢ shipping.) From Leslie Clark, 311 Waterloo Road, Whitehall MT 59759. (406) 287-3078.



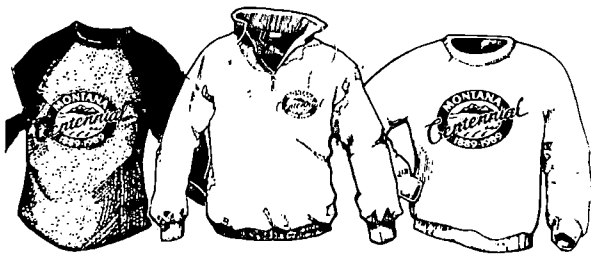
**Centennial Breastcollars.** Dress up your horse with top-quality cowhide, handcarved, handsewn. (\$175). From Montana cowboy Norman Schuchard, Box 47, Harlowton MT 59036. (406) 632-5551.



**"Spirit Horse of the Rockies."** Book by Susan R. Nardinger. Foreward by Randy Ray, Exec. Director of Kentucky Derby Museum. Photos. The story of Spokane, only horse born & trained in Montana to win Kentucky Derby (1889). Softcover, 176 pages. (\$9.95)

**Bronze Statue of "Spokane."** 16½"l.x9"w.x22½"h. on marble & walnut base w/Leatherbound Limited Edition of "Spirit Horse of the Rockies." (\$1,889 before 5/7/89) (\$1,989 after 5/6/89).

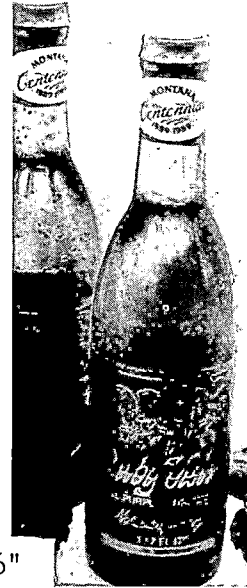
Both from Spirit Horse Enterprises, 415 40th Street North, Great Falls MT 59401. (406) 452-9421.



**Centennial Potholder.** Washable 7" cotton square, quilted, bound, loop for hanging. One side white w/Centennial logo, reverse a random calico print. (\$4 plus 50¢ postage.) From **Cool Hand Potholder Co.**, P.O. Box 1151, Red Lodge MT 59068. (406) 446-1499.

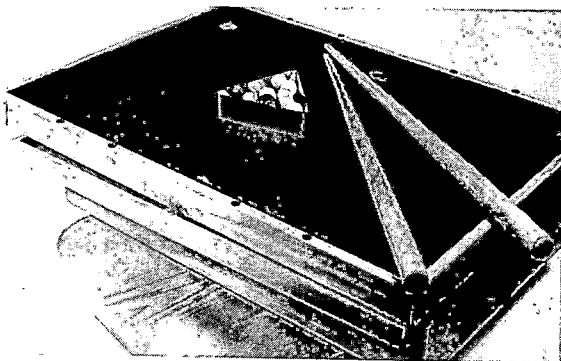
**Centennial Sportswear.** Silkscreened T-Shirts, Sweatshirts, Jerseys, Caps. At Main Mall (Bozeman) (406) 587-0760; Southgate Mall (Missoula) (406) 549-5216; Rimrock Mall (Billings) (406) 656-0010.

**Official Licensed Centennial Decanter.** Available exclusively at Montana State Liquor Stores.



**Centennial All Purpose Dressing.** Naturally inviting, special Gourmet Flavor. Ruby Valley All Purpose Dressing is perfect for salads, sandwiches, meats and poultry. Delightful Sweet & Sour Flavor! All Natural, too. Gift Pack (12.7 fl. oz. bottle): \$6.50. (If mailed outside Montana add \$2.50 postage.) Other prices on request. From **KB Products, Inc.**, 268 Davis Lane, Twin Bridges, MT 59754. (406) 684-5753. Visa/MC.

**Centennial Swivel Pool.** Play Pool Sitting Down! 11"x16" in Red Cedar, table swivels on ball-bearing base to any shooting position. Authentic Ball Movement. Try "Pool Solitaire"! Numbered Limited Edition (1000). (\$89.95.) From **Mike Prather**, P.O. Box 134, Florence MT 59833. (406) 273-2207.



**Authentic Biederlack Blanket Throw.** This 60" x 40" blanket features Centennial emblem. In Bone with Royal Blue logo. \$25 plus \$2 postage. Exclusively at **Herberger's** stores. By mail from **Herbergers**, Rimrock Mall, 24th & Central, Billings MT 59102. Major Charge Cards.



**Centennial Balloons.** Imprinted w/Centennial logo. High Quality Reproduction. Add Your Message to second side. Perfect for Parties, Parades, Displays. (\$32 per gross plus shipping.) From **Quality Promotional Products**, P.O. Box 1255, Helena MT 59624. (406) 442-9440.





STATEHOOD CENTENNIAL OFFICE  
PO Box 1989  
Helena, Montana 59620

## Officially Sanctioned Centennial Products

### Publications

**THE WAY IT WAS** by Henry Jorgensen. Autobiography of a boy's life in the Danish community of Dagmar, Montana. Illustrated. \$6 plus postage from Henry Jorgensen, 733 Sixth Avenue, Helena MT 59601.

**GREAT ESCAPES - MONTANA STATE PARKS** by Rick Newby. Maps, Color Photos & Illustrations, Directory of Parks. Proceeds support State Park System Educational Activities. \$9.95 from Montana Department of Fish, Wildlife & Parks, 1420 E. 6th Avenue, Helena MT 59620. (406) 444-3750.

**CELEBRATING 100 YEARS - THE MONTANA CENTENNIAL QUILT and POSTER.** Book by Mary Hurley & Marian S. Sweeney. Photographs. Story of making of the Montana Quilt by women in all 56 counties. \$14.95 postpaid. **QUILT POSTER**, 17"x24" full color. \$10.50 from Mary Hurley, 260 Paso Drive, Stevensville MT 59870. Visa/MC.

**100 DELEGATES: MONTANA CONSTITUTIONAL CONVENTION - 1972.** Hard Cover, 114 pages of pictures and history. Limited Edition. \$27 from Grace Bates, 6800 Amsterdam Avenue, Manhattan MT 59741. (406) 282-7220.

**MY FIRST 100 YEARS** by Mabel Ballantyne (\$11). **CHARLES ANCENEY AND THE FLYING D RANCH**, (\$3.50), **LAW AND ORDER** (about Gallatin County Jails, Court Houses) by Merrill Burlingame (\$1.50), **BOZEMAN, MONTANA** by Freeman and Putman. Most comprehensive history to date. (\$6), **ON THIS DAY**, historic events by Burlingame and Fechter (\$1.25), **MEMORIES OF DAYS GONE BY** by Bayard Todd (\$5). All plus postage. These and others available from Gallatin County Historical Society, 317 West Main, Bozeman, MT 59715.

**COMMEMORATIVE STAMP COVER.** Free with each sheet of Montana Centennial Stamps. Cover painted by Vern the Boy of Box Elder. Back Cover has photographs of Montana's 6 commemorative stamps. At Post Offices in Montana.

**THE LAST BEST PLACE.** The new & supreme Montana Anthology. 1,185 pages, hardcover. \$39.95. Catalog of other publications available from Montana Historical Society, 225 North Roberts, Helena MT 59620. (406) 444-2890.

**MONTANA HISTORY CALENDAR.** 14 month appointment calendar. 9"x12" w/ 15 historic duotone artworks and Montana history and trivia recorded in daily events. \$6.95 postpaid. From Montana History Calendar, 4641 White Street, Missoula MT 59802.

**MONTANA HOSPITALS - A HERITAGE IN TRANSITION.** A history of Montana hospitals w/ photographs. \$20. From Montana Hospital Association, P.O.Box 5119, Helena MT 59604.

**TIME NEVER ENDING.** History of St. Xavier, Montana. Contact Esther Kehler, St. Xavier MT 59075.

**FEDERATION FAVORITES COOKBOOK.** By General Federation of Women's Clubs of Montana. Includes club histories. Contact Sandra Tecca, 2933 Terry, Billings MT 59102.

**MONTANA, A CENTENNIAL CELEBRATION.** A Musical Revue for middle and upper elementary schools, w/Director's Score, Accompaniment Tape, Scripts. \$33 from Arlene Ydstie, 2103 West Canal Drive, Kennewick WA 99336. (509) 735-2023.

**CENTENNIAL NOTE PAPER** w/logo on Sky Blue Vellum Paper. \$1 per card or 6/\$5. From Grin & Share It, P.O. Box 447, Bonner MT 59823.

Design:  
Doug Giebel

# MONTANA '89er



THE OFFICIAL NEWSLETTER OF THE  
MONTANA CENTENNIAL COMMISSION AND OFFICE

## CENTURY CITIZEN HONORED

Madge Low was honored on her 103rd birthday with a party in the Madison County Nursing Home in Ennis. At the party, Leo Ellingson, Director of the Montana Centennial, presented her with a "Century Citizen" Certificate signed by Governor Stan Stephens. In a letter to Mrs. Low, which was read by Ellingson, Governor Stephens said:

As we begin to celebrate the 100th anniversary of Montana's admission to statehood, we are reminded of the many changes that have occurred during those years. You have experienced that dynamic history and sustained the spirit which is fulfilling this state's destiny. Therefore, it is my pleasure to designate you an official *Century Citizen*.

As a token of our appreciation and admiration, I am forwarding to you a deed symbolizing your investment in "The Last of What is Best in America" and placing your name on a Century Citizen Honor Roll to be maintained in the permanent records of the state. The deed is presented courtesy of US West of Montana, sponsor of a special Centennial project honoring you and other Montanans whose lives span that of the state.

We have much to learn from and about our eldest citizens and, with your permission, local school students may be contacting you for an interview.

Please accept my best wishes and congratulations for the contributions you have made to your community and to our state.



Leo Ellingson presents a Century Citizen Certificate to Madge Low at her 103rd birthday party.

Madge Marshall, youngest daughter of Jack and Margaret Marshall, was born on the family ranch. There were six girls and seven boys in the family.

Her grandfather, Bob Dempsey, was one of the first white men in the area. A mountain man, he came into the Deer Lodge Valley in 1853. He was there during the time of the vigilantes, and erected a toll bridge on the Ruby River.

Madge was married when quite young to Jack Connors. She and her sister Cora were waiting tables at the Karsarg Mine, which was located in the Sheridan, Montana area, when she met Jack. He worked there and in the Butte mines for a time and then homesteaded in the Madison. They had two sons, Marshall and Roy. They moved to California, and Marshall and Jack worked in mines there for a time.

Jack died of miner's consumption. Madge married another California miner, John Utter. After Utter's death, Madge married Victor Low. They made their home in Long Beach, California.

After his death, Madge came back to Montana to live with her brothers Jim and Frank. After a fall at the ranch home, she went to live at the Ennis Nursing Home. Her brother, Jim still resides in Twin Bridges.

Madge has had many interesting stories to tell of her childhood and young adulthood. She has a great sense of humor and is always joshing with someone.

The first grade class of Ennis Elementary School, taught by Deanna Warwick, sang several songs for Madge's 103rd birthday celebration, including "My Home is Montana" and "Montana."

There have been over 300 Century Citizens placed on the honor roll so far this Centennial year.

---

"PRIDE OF POPLAR"	3
COMMUNITY CELEBRATIONS	6
JULY CENTENNIAL CALENDAR	10
MEET THE STAFF	15

---

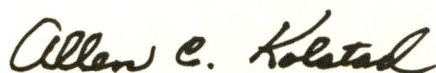
## FROM THE CHAIRMAN

The tremendous response of the people of Montana to the Centennial continues to be most evident by the fact there is not a day in June without at least one Centennial event. This pace is expected to be even faster in July as many, many communities are combining Centennial celebrations with the annual Fourth of July celebrations. There are about 40 such activities scheduled for Independence Day. Other communities have demonstrated a fine spirit of cooperation by avoiding Independence Day when scheduling their July Centennial events. I certainly advise you to look over the July schedule of Centennial events as printed elsewhere in this issue of the '89er. It will gladden your heart just to realize how proud Montanans all over the state are expressing their love for the state in numerous ways.

Many communities in Montana are combining their Centennial celebrations with school reunions. It takes a lot of planning and preparations to stage a successful school reunion, but the results are worth the effort. Many people have a great time renewing old acquaintances and reminiscing over bygone days. A lot of people who left Montana after graduation return for these occasions, and quite regularly report they wish they would have stayed here.

It seems to me the whole thing centers around involvement. The Montana Centennial is a success simply because a lot of people are getting involved, and strange as it may seem, the people who enjoy it the most are the people who do most of the work. There's an old saying, if you want a difficult job done well, give it to the busiest people in town. The people of Montana cities and towns have a long history of community involvement, so it seems natural for them to get involved in the Centennial. And when it is all over, they will be the people who enjoyed it the most.

Congratulations, Montanans.



Lt. Governor Allen C. Kolstad  
Chairman, Centennial Commission

### Letter to the Editor

Dear Sirs:

In the May issue of the *Eighty-Niner*, I believe there are some mistakes in the article "Not Many Have Been to Gopher." On the 1925, 1948, and 1976 maps I have, Quietus is in Big Horn County, not Powder River County.

Elloam in Blaine, on my map is spelled Eloam.

Ynot is in Phillips County, not Hill County.

Sollid is in Pondera County, not Toole County.

Hazny is in Garfield County, not Valley County.

I did not find Tueson or Cabin City.

Also, 15 of the 20 had post offices:

Iron Rod, 1869-1872 & 1876-1882

Gopher, 1917-33

Ynot, 1917-31

Quietus, 1917-60

Korner, 1921-38

Beehive, 1910-53

Spion Kop, 1906-09 & 1909-33

Sollid, 1909-17

Fattig, 1903-16

Truely, 1884-1905

Elloam, 1916-35

Rattlesnake, 1917-32

Twete, 1910-29

Hopsonville, 1915-25

Sincerely,  
Marvin A. Balzer  
Worden, MT

### EDITOR'S NOTE

It is our hope for the next few months, to publish the *Montana '89er* on a monthly basis. In order to do this, we will need copy from all over Montana concerning sanctioned Centennial events and projects. Well-written, brief stories will be appreciated. High quality black and white photographs will also be welcome. Of course, we must reserve the right to edit according to space limitations.

## MONTANA CENTENNIAL OFFICE

### VOLUNTEER COMMISSION

Lt. Gov. Allen C. Kolstad, *Chairman*

Patricia DeVries, *Polson*

Nancy Y. Dumont, *Wolf Point*

Rita Edwards, *Glendive*

Marilyn Bogut Frazier, *Great Falls*

Frank I. Haswell, *Helena*

James Haughey, *Billings*

David C. Johns, *Butte*

Robert J. Kelly, *Missoula*

Nancy McCaslin, *Bozeman*

Tonia Stratford, *Miles City*

Debbie Vandenberg, *Havre*

The monthly *Eighty-Niner* presents news and views in celebration of the 100th anniversary of Montana's statehood in 1889.

For information call 444-1989

P. O. BOX 1989, CAPITOL STATION, HELENA, MT 59620

### OFFICE

Lt. Gov. Office:

John Kinna, *Executive Assistant*

Denise Thompson, *Executive Secretary*

Centennial Commission Office:

Leo Ellingson, *Centennial Director*

Irvin Hutchison, *Editor '89er*

Doug Giebel, *Public Affairs*

Carolyn Linden, *Sanctioning Secretary*

Brian Anse Patrick, *Field Operations*

and *Grants and Sanction Manager*

Judy Fisher Rolfe, *Receptionist*

Susan Worl, *Commission Secretary*

Mark Copenhaver, *Float Coordinator*

Jeanne Amsberry, *Acres Secretary*

## STUDENTS TO PRODUCE CENTENNIAL ART

A new Centennial project will involve children in every Montana school producing art this spring that relates to Charlie Russell and his times.

Each participating school will have an exhibit of its students' artwork and select up to six of the works for inclusion in a final exhibit that will travel the state for display in conjunction with major Centennial events during the summer and fall.

The project is named the "Charlie Russell Centennial Art Trail."

If every Montana school participates, the final touring exhibit could contain as many as 2,500 works by students in kindergarten through college.

The first statewide student exhibit will open in Great Falls July 22-28.

A week prior to the Great Falls event, about 100 authentically costumed Native Americans, representing the state's Indian tribes, and 300 authentically outfitted cowboys will make a cross-country trail ride from Russell's first Montana home, near Utica, to Great Falls. The riders will arrive in Great Falls in time to lead the official Centennial parade July 22.

The art exhibit will appear in Billings during the Centennial cattle drive in September, and in Helena during the week of November 8, the actual 100th anniversary of statehood.

Organizers hope to arrange for the exhibit to appear in Washington, D. C. around Christmas, since the national Christmas tree this year will come from Montana.

## GLACIER GALLERY

As a Centennial project, Glacier Gallery in Kalispell is displaying a collection of representational art by Montana artists, principally deceased, including paintings by Charles Russell, Olaf Seltzer, E.S. Paxson, Joseph Henry Sharp, Will James, and many others.

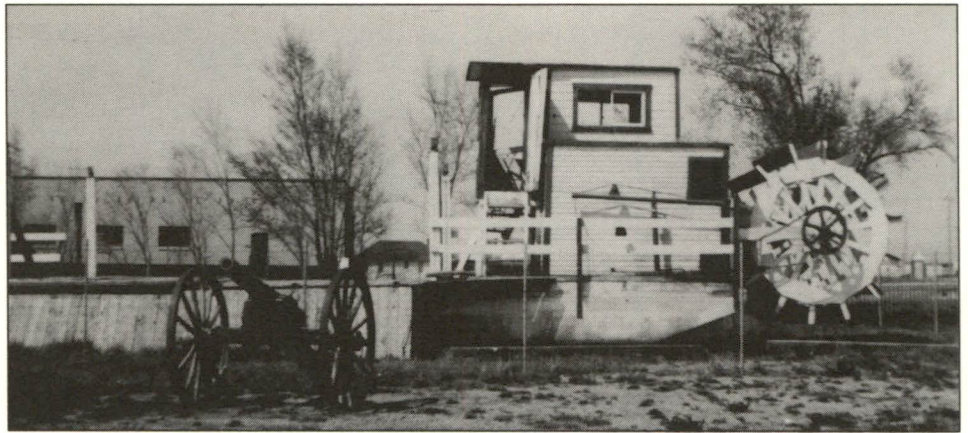
Complimenting this exhibit will be Indian artifacts representational of Montana tribes, and books written and illustrated by Montana writers and artists.

There will be no admission charged. The show opened March 1 and will continue through the end of 1989. The exhibit will run in conjunction with "openings" of regional artists painting in the Flathead area. Contemporary works will be for sale.

## "PRIDE OF POPLAR" TO BE RESTORED

An ambitious group called the Poplar Housing Authority has undertaken a project to restore the "Pride of Poplar" ferry boat.

The final voyage of the ferry boat was made in June 1969, when the Roosevelt County lo-boy hauled her up from dry dock to her final resting place inside the Poplar Museum yard. She was one of the last ferry boats on the Missouri River, descended from a long line of predecessors. Her maiden voyage was in 1949 and she ran strong until 1968 when Poplar Bridge spanned the Missouri River. The ferry was purchased by the Poplar Chamber of Commerce (later put into the Poplar Ferry Association) and it served three counties. Sailing faithfully across the Missouri an average of 376 crossings each month, the "Pride" ran during the day, from April through November. A husband and wife couple operated the boat the last few years and the "Pride" can boast that she was unique in that sometimes she broke water with a woman at her helm.



The distance between Poplar and the South Side was shortened because of the ferry; many today can't appreciate the dramatic role the boat played in history. To cattlemen during calving season, with a north storm threatening, she meant the difference between livelihood and disaster. To people who were sick, she meant hope and sometimes life. The "Pride of Poplar" was exactly what her name implied. She served well.

Time and adverse weather have taken a toll on the ferry. Its deteriorating condition has become evident, and steps need to be taken now to preserve the ferry and its history for future generations. Once the ferry is restored, it will be displayed proudly in the Poplar Museum yard, with free admission to the public.

There have been several offers to buy the ferry boat (one offer to buy her and move her to New York state), but she is not for sale. The "Pride" is a vital part of Poplar history and should be part of the Montana State Centennial commemoration. The "Pride" symbolizes the bygone days of the Missouri River boats that were once a familiar mode of transportation. People of Poplar believe the "Pride" is the only one of its kind that is still in existence, and is on public display in Montana.

## FLATHEAD VALLEY TO CELEBRATE WITH CAKE

A 100-ft Centennial birthday cake will be cut and served in Gateway West Mall in Kalispell July 1. The cake will have scenes of the history of the Flathead Valley including such things as the steam boat era, the arrival of the railroad, Going-to-the-Sun Highway, Hungry Horse Dam, and Glacier Park Airport.

There will be a celebrity on hand to cut and serve the cake at \$1 per piece, and the money will be donated to the United Way. A Valley Centenarian will be served the first piece of cake.

## Woman's Week Book Published

The Montana Extension Homemakers' Council of Montana State University is publishing a Montana Centennial book commemorating 25 years of Woman's Week. Authors of the book are Vivienne Kintz, Elaine Schlenker and Torlief Aasheim.



Vivienne Kintz

Vivienne Kintz was the Home-maker Program Leader at Montana State University 18 years ago when the Extension Service felt there was a need to expand the service to meet the need of all the women of Montana, rather than just the members of the Home Demonstration Clubs, as they were called at that time. There was also recognition of a need for a statewide event. Out of this need came the idea of Montana Woman's Week.

For a week each year women from all over Montana gather on the MSU campus for instruction in such subjects as communications, leadership development, English literature, Montana history, and poetry.

Kintz said they were surprised when women came who had never been far from home before. She said there were quite a few Indian women who came, and these women brought a slogan, "The F.B.I. is here." "F.B.I." meaning "full-blooded Indian." Several of these women earned the certificate that is given for four years attendance at Woman's Week.

Over 8000 women have attended the program during the 25 years. There are five women in Montana who have attended all 25 years.

In talking about her experiences, Kintz expressed gratitude for the marvelous cooperation the program has received from the MSU campus.

## FROM THE DIRECTOR

I have just returned from the six-state quarterly Centennial Conference, which is a meeting of the Centennial Directors of all six states which are observing Centennials this year.

I am very pleased to report Montana's Centennial compares favorably with the other states. We certainly are near the top in percentage of population participation. Other state directors were surprised to see how community after community in Montana is going ahead with Centennial projects. In Montana the Centennial has truly become a grass-roots movement.

The other states observing Centennials also have excellent programs. Because they have larger budgets, they are able to plan and present extravaganzas that will be outstanding and certain to draw large crowds. The whole six-state area should benefit from a tremendous tourist year because of the special attraction of the Centennial events. Based on the flood of inquiries our office receives daily, there's no doubt that a tremendous number of people are planning to visit Montana this year. This will be an exceptional summer for tourism.

We are distributing 100,000 copies of our new official products catalog, and we have our final updated calendar ready.

At this time the Centennial Wagon Train is rolling its way across Montana. The wagon train, organized by Montana Draft Horse and Mule Association, consists of 78 authentic wagons (pneumatic tires are not allowed), is powered by 300 horses and draft mules and will be accompanied by 300 people.

"We have parades and all sorts of events in the communities along our route and at our overnight campsites," said Marlene Teague, secretary-treasurer of the Draft Horse Association, "and the public is welcome."

ESPN television will broadcast a one-hour documentary about the wagon train on July 17 at 7 p.m., according to Teague.

The wagon train has visited Bannack, Dillon, Virginia City, Ennis, Pony, Willow Creek, and Boulder. Still scheduled are Jefferson City—July 1, Montana City—July 2, and Helena—July 3-4.

I encourage everyone to participate in a Centennial event—they are yours to enjoy!

Leo Ellingson  
Centennial Director



AT&T Presents Check: Representatives of AT&T present a check for \$1000 to Lt. Governor Allen Kolstad to help promote the Montana Centennial. Pictured left to right: Bill Woods, AT&T vice president of the Western Region External Affairs; Bob Little, AT&T district manager, Idaho and Montana; Lt. Governor Kolstad; Rob Ferris, sales manager; and Leo Ellingson, Centennial Director.

## JUNE CENTENNIAL COMMISSION MEETING

Centennial momentum continues to increase, as evidenced by the 173 new applications for official sanctioning which were approved by the Montana Statehood Centennial Commission at its June 9, 1989 meeting in Helena.

The Commissioners heard reports on the status of Centennial projects, both in and out of state. Director Leo D. Ellingson reported on the highly successful performances given by the Republic of China acrobats from the China Folk Arts Training Center in Taiwan. These performances, the first in Lewistown on June 5, the second in Great Falls on June 6, were offered to the people of Montana as a special 100th birthday present from the Republic of China. The performances were spectacular, Ellingson said.

The republic of China government was so pleased by the reception of the acrobatic troupe that it offered two more Centennial performances by a different troupe, a Chinese folk art group, which will take place in Billings and Helena, August 13-14.

Ellingson also reported on the June 1 dedication ceremony for Montana's Centennial Highway 89. The dedication took place beneath Roosevelt Arch entrance to Yellowstone National Park in Gardiner. More than 300 persons attended as Phil White Hawk of Ringling performed a ritual sweet grass purification of the highway. State Senator Peter R. Story (41st District) also attended.

Centennial Highway 89, originally proposed to the Centennial Commission by the Ringling Women's Club, winds through 24 Montana towns on its 402-mile north-south journey. The scenic route will be marked with special red, white, and blue highway signs.

Ellingson also attended a luncheon with Missoula officials, during which he presented a letter from the Governor and a sanction designating the Missoula County High School Band as the Montana Centennial's Official Representative at the 1990 Rose Bowl Parade.

Public Affairs Coordinator Doug Giebel gave an account of the June 4 Montana Centennial Picnic in New York's Central Park. Approximately 500 displaced Montanans attended the event, where they ate good Montana-style food and listened to Montana entertainers. Thirty members of the Dillon Junior Fiddlers were on hand, courtesy of Norwest AirlinK, the Official Airline of the Montana Centennial, and other benefactors.

Sanctioning Director Brian Patrick showed samples of some of the new Centennial products submitted before the April 15 product sanctioning deadline. The Pen Corner in Bozeman will be offering an engraved, serialized Parker duofold Fountain Pen bearing the official Centennial logo. The pen, the top of the Parker line, comes in a mahogany presentation case, and only 1000 will be produced.

Patrick also reported that sales of Centennial products, as evidenced by royalties paid to the office, are increasing at an impressive rate. The new catalog is also available, and more than 40,000 copies have been distributed. The updated

Centennial calendar of events is also available.

The Centennial float has been out on the road, driven by Mark Copenhagen, float coordinator, who was introduced at the meeting. Mr. Copenhagen, from Ruddyard, Montana, will be piloting the float in about 40 Montana Centennial parades and events this summer. There are still some vacancies in the float schedule, reported Copenhagen, and he would like to hear from communities that would like to have the float appear as a part of their festivities.

The float was well received on its first outings, first in East Glacier and West Glacier. Copenhagen now refers to himself as "the float valet."

## MONTANA CENTENNIAL REGATTA

The Montana Centennial Regatta is scheduled for July 28-30 at Whitefish. The Whitefish Lake Boat Club and Regatta Association has been sponsoring power boat regattas on Whitefish Lake at the Whitefish beach since 1936. Last year, 1988, was the 50th annual regatta, with only two years missing during World War II due to gas rationing. The 50 year celebration included bringing back and having a banquet with and for the pioneer boat racers in Montana. There were 142 in attendance for a nice banquet.

The Regatta, dedicated to the Centennial, brings racers from all over the northwestern United States and three western Canadian provinces.

In addition to the power boat racing itself, held at the City Beach, the Queen of the Waters will be crowned. There will be a downtown parade including floats and the power boats that are competing. There will be an awards presentation for the winners at the end of each day of competition. It will be a three-day event with the parade and crowning of the queen on Friday, followed by a street dance, power boat racing on Saturday, followed by an award ceremony at a local establishment. There will be power boat racing again on Sunday, followed by another awards ceremony at another establishment before the racers head home.



*The Consul General of Israel, Harry Kney-Tal, visited the Centennial office on May 22. During the visit with Lt. Governor Allen Kolstad, Kney-Tal was presented with a Centennial belt buckle.*

*Pictured left to right: Leo Ellingson, Centennial Director, Dr. Barry Ferst, assoc. professor of Philosophy at Carroll College, Harry Kney-Tal, the Consul General, and Lt. Gov. Allen Kolstad.*

# COMMUNITY CENTENNIAL CELEBRATIONS

**BUTTE** • Butte Silver Bow Arts Foundation has a unique Centennial exhibition. It is a **collection of over 6,000 commemorative badges** belonging to Father Edward Courtney of Butte. The badges represent organizations, election campaigns and other events of importance which occurred from the 1800s until the present. They are representative of not only Montana but other parts of the United States. The exhibit will be displayed during July and August of 1989 at the C. W. Clark Mansion, the Arts Chateau in Butte.

The oldest of the badges date from the end of the last century. The exhibit will be enhanced by a display of election posters, of deceased candidates, and other memorabilia appropriate for the display. This educational exhibit will be viewed by thousands of summer visitors to the area. Also on display as part of the Arts Chateau's permanent exhibit is the Period Museum.

The Arts Chateau is the only publicly owned arts facility of its kind in southwestern Montana. The turn-of-the-century mansion was built by Charles Walter Clark, son of the Copper King W. A. Clark, and his wife, Katherine in 1898. The French-style building was completed in 1901. The building was purchased in 1977 by a volunteer group and deeded over to the city to serve as the county's arts center. The twenty-six room mansion is decorated with beautiful woods from around the world, stained glass windows, and craftsmanship unequalled today. Two galleries house traveling exhibits. A \$1 donation is requested at the door of the Arts Chateau. Summer hours: open 10 am until 6 pm Tuesday through Saturday; noon until 5 pm Sunday; closed Monday. (Hours effective Memorial Day until Labor Day).

**CARBON COUNTY** • As a sanctioned Centennial project, the Carbon County Museum at Red Lodge is preparing an **educational historical exhibit depicting Red Lodge in 1889**. It will be displayed permanently in the museum.

The exhibit will consist of six to twelve photographs of Red Lodge in 1889 and captions that will capture the spirit of the fledgling, five-year-old town of that year. Some of the themes for the photos will include coal mining, the railroad, Crow Indians, ranchers and other early settlers, schools, and politics.

The display will be completed by July 1, and will coincide with the influx of summer tourists and with the staging of three registered Centennial events scheduled to be held in Red Lodge in early July: the Mountain Man Rendezvous, the Home of Champions Rodeo, and the Can-Can Revival.

The exhibit will serve the 6,000 people who visit the Carbon County Museum annually.

**DRUMMOND** • The Drummond Centennial Celebration will be held Saturday and Sunday, July 8 and 9. On Saturday, July 8, starting at 3 p.m., there will be a bathing suit contest, skits, pony express ride, kiddies parade and street dance. On Sunday, July 9 there will be a rodeo parade at 12 noon, followed by the American Legion rodeo at 1:30 pm.

**FALLON** • Perhaps the diversity of Centennial observance in Montana can be demonstrated by a project being carried out in Fallon, Montana by the Prairie County Extension Homemakers Clubs. These clubs have embarked on a project to **renovate and relocate an old cowboy bandstand**. They will also attempt to make people aware of the bandstand, educate the public to its importance in the culture of the early 1900s, and involve members and families of Prairie County Homemaker Clubs in the project.

The Cowboy Band is famous in this eastern Montana area for the many people they entertained in the early 1900s. Their biggest trip and engagement, talked of still, was the time the Band traveled to South Dakota and played for President Theodore Roosevelt.

This band had a bandstand from which they performed in Terry, their hometown.

The bandstand has been abandoned, unused and unkept for many years, and is now sitting at the Prairie County Fair Grounds. The Prairie County Extension Homemakers Clubs (there are seven clubs involved) have voted to renovate, move, and renew memories with this project. Next they plan, with the town of Terry and the County Commissioners, to select an appropriate location in Terry for the bandstand. Finally, the bandstand will be relocated and dedicated.

Clubs taking part in this activity are made up of members (about 70) from all corners of the county. Thus, involving these members and their families will make the project a county project, drawing community members together as they work together.

**FERGUS COUNTY** • The Fergus County '89ers are offering **tours of various attractions** in the Fergus County area, July 1-15.

The first tour will be July 1-3 of Lewistown Centennial Sites, including buildings and Ft. Maginnis.

The second tour, July 5-7, will be of Judith Peak, Big Springs, and will include three gold mines.

The third tour, July 7-8, will be of the Maiden townsite area.

The last tour will be July 10-15 and will include Ft. Maginnis; Graveyard; the Gilt Edge area; Calamity Jane's home; "Moonshine Place"; Hanging Tree; Buffalo Jump; Father DeSmet homesteads, and others.

For all out-of-town tours, pack your own lunch. Transportation will not be furnished. You'll see ghost towns and learn much history of the areas. There are lots of miles involved.

**GALLATIN COUNTY** • Gallatin County's biggest Centennial event will be the **Lewis and Clark Pageant**, an outdoor drama with a cast of approximately 150, including many Native Americans, who will re-enact the episodes of the 1805-06 Expedition.

The Pageant site will be the Missouri River Headwaters State Park, near Three Forks, Montana. Dates for the four

# COMMUNITY CENTENNIAL CELEBRATIONS

performances are: Saturday, July 22 and July 29 at 5:00 p.m. and Sunday, July 23 and July 30 at 3:00 p.m.

This 90-minute production will have scenes with horses and boats, in the re-enactment of: the capture of Sacajawea, President Jefferson and Meriwether Lewis at the White House, winter at Fort Mandan, the discovery of the Missouri headwaters, the junction of the Yellowstone and the Missouri rivers, the parting of Sacajawea at Fort Mandan, and more.

The Pageant is co-sponsored by the Gallatin County Historical Society and the Three Forks Area Historical Society. The Department of Fish, Wildlife and Parks is cooperating with the Pageant Committee in this historic, entertaining and educational event. A Centennial grant, money from the sale of Centennial license plates, was awarded to the Pageant by the Gallatin County Commissioners.

This pantomime drama takes place on the banks of the Missouri River and the audience is seated on the hillside on benches, where all can see and hear. Some folding chairs will be available for senior citizens; an umbrella may come in handy if the day is hot and sunny. Shuttle buses will be provided for those wishing a ride from the parking lot to the Pageant site. Anyone wishing to take part, should contact the Director, Sharon Dickman, 285-6707.

**HALL SCHOOL** • The Hall School is planning a Centennial Celebration in the form of an **all-school reunion** of the classes of 1891 to 1989. The celebration is scheduled for Saturday and Sunday, July 15 and 16. The Hall Elementary School is about 8 miles south of Drummond, Montana. In spite of the fact that it is a rural school, it has been in operation for 98 years, and nearly 600 letters have gone out to graduates. Former students are welcome, as well as all other interested persons.

It is mostly a social gathering at which memories will be renewed, but there are some planned activities, such as a barbeque beef dinner, photo sessions, a pageant, a dance, and hay rides. Sunday there will be a church service, an old fashioned picnic, and games. A memory book is being prepared.

**MISSOULA** • The fourteenth annual Fourth of July celebration will be held at the historical museum at Fort Missoula. At South Gate Mall there will be old time fireworks, the "1812 Overture", live cannon, Battery A light artillery, a cavalry charge, and the Missoula City Band playing Centennial music.

Throughout July there will be historic window displays in downtown Missoula. July 14-15 the Hellgate Rendezvous Arts and Crafts Fair will be at the County Court House lawn.

July 15th there will be the Western Montana Centennial Parade and Hellgate Centennial Jubilee. The parade of exciting entries will head from the UM campus to the north end of Higgins Ave., beginning at 10 a.m. The Montana Centennial Commission float will be in the parade. There will be displays and performances throughout the afternoon.

**MISSOULA** • Much progress has been made towards the August 11-13 **Centennial Pow Wow** to be held in Missoula at St. Joseph's School Auditorium, 430 West Pine.

The encampment has been awarded a Missoula County Centennial Grant of \$2500 and a \$500 pledge from the Southgate Mall. Further support has come from the Missoula City Council in the form of Resolution #4876, expressing the city's support and urging the entire community to do likewise. Support has also come from the Forest Service which is looking into a possible Smoke Jumper Fly-In, as well as providing help with security rangers, tipi poles, and water trucks. The committee is very active in its search for necessary funds; they recently completed a major mail campaign. They still need volunteers in many areas and it is hoped the upcoming auction will attract significant volunteers and contributors. Funds raised are earmarked to defray the costs of security, sanitation, and prize money.

Since a gathering of this nature has not happened in over one hundred fifty years, the Pow Wow and Encampment is receiving national attention. Feature articles are scheduled to appear in Spring/Summer issues of the following magazines: *American West*, *Native Peoples*, *Northwest*, *Montana Magazine*, *Outdoor and Travel Photography*, *Montana Motorist*, *Modern Maturity*, *Motorhome*, *Conde Nast's Traveler*, and *Endless Vacation*. It is hoped that there will be other articles in some of the over 50 publications contacted about the Pow Wow.

"The response from our community for this event has been terrific," comments Event Chairman Chris Roberts. "We are extremely encouraged by the interest shown by the national press and the letters and calls from all over the country. What we need now are both the people and the finances or in-kind contributions to help us overcome various hurdles. We want to guarantee that the visitors attending will be treated to the *best* Missoula can offer. They are coming, so let's roll out the carpet and give them something to remember."

People interested in donating items to the auction are encouraged to contact the committee via Chris Roberts, 728-2180, or Dick Vick, 728-8446. Other information may also be obtained in this way. The committee meets Mondays, 7:15 pm, at the First Baptist Church at 308 West Pine in Missoula and the public is welcome.

**RED LODGE** • The Auh-Tah-Kwoi Performing Arts Ensemble, a Centennial Project licensed by the Montana Centennial Commission, presents for the **Centennial Rendezvous** in Red Lodge, "Piye: The Legend of Star Boy," a Native American dance/drama depicting how the Blackfeet received sacred tribal ceremonies. Scripts were developed from interviews with elders at Browning and the material to be presented to audiences this year has never before been shown to the public. The production began with an educational grant from the Montana Arts Council and Target Stores and is presented by the Montana United Scholarship Service, an all Indian non-profit educational corporation in

# COMMUNITY CENTENNIAL CELEBRATIONS

existence since 1970. Most of the ensemble members are involved in the Montana Indian Teacher Training Program at the College of Great Falls. Music is by the Kicking Woman Singers of Browning and the direction and choreography is by Rosalie M. Jones of Daystar Productions. The production is Saturday, July 1 at 2:00 pm.

Two cavalry units and one artillery unit will be attending the Centennial Mountain Man Rendezvous this summer.

The Montana Memorial Detachment, 7th Cavalry, Co. K, with members from Billings, Laurel and Joliet will attend July 1-9 with the following daily schedule:

10:30 Drills and Training  
1-2:30 Open Camp, Demonstrations  
2:30 Drills and Training

Army of the United States, 7th Cavalry, Co. M  
Army of the United States, Battery A, 1st Montana Light Artillery

Both of these units are from Hamilton, Montana and will attend July 6-9 with the following daily schedule:

11-12 noon Cavalry Drills and Artillery Demonstrations  
12 noon-3 Open Camp  
3-4:30 Cavalry Drills and Artillery Demonstrations

**WINNETT** • The Montana Centennial celebration in Petroleum County and Winnett is well underway with Mayor Burt Bevis receiving word from the National Arbor Day Foundation that the Town of Winnett has met all requirements and has been designated a "Tree City, USA."

Mayor Bevis proclaimed April 26, 1989 Arbor Day in Winnett and LuAnn Knutson, member of the Town Council, and Tree Board Chairman, received a plaque, a flag and road signs designating Winnett as "Tree City, USA," presented by John Walkowiak, State Forester.

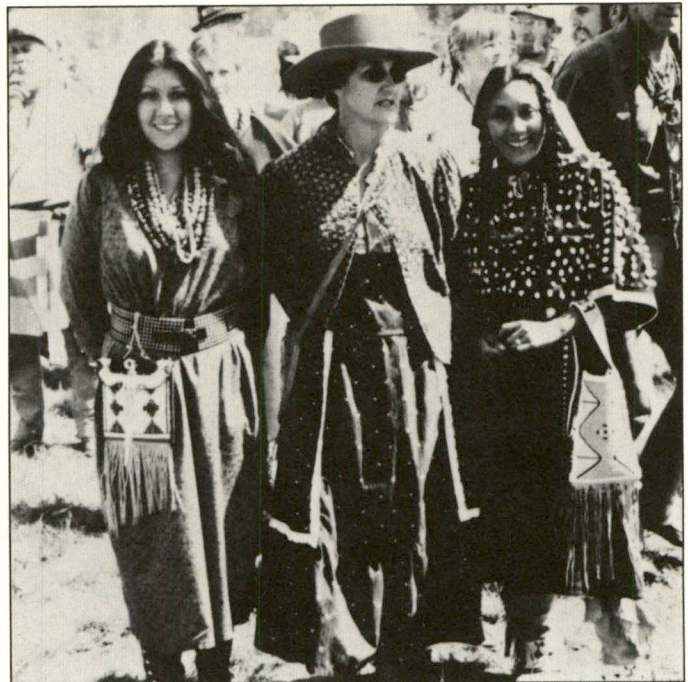
Then during a downpouring of rain, four new trees were planted in the George D. Ore Memorial Park, and eight new trees at the football field.

The Winnett Cemetery also went into a tree planting program with Caretaker Tommy Wangseng in charge and Mrs. Wangseng and Earl Brady as assistants. A total of 83 lilac bushes, shade and landscape trees were planted.

Winnett Elementary School participated in a Centennial program. Each classroom had a separate program, with parents participating.

The Town of Winnett is encouraging a "Clean Up, Trim Up and Haul Off all those unwanted eyesores."

All events are preparatory to the major celebration which will be held July 15 and 16 when the seventh all-class reunion of Winnett High School graduates will be held. Winnett High School opened in 1919. The reunion organization was formed in 1954 and the reunion is held every 5 years. There will be a reunion meeting, parade, banquet, picnics, special breakfasts, one and three mile Centennial runs, two dance bands in separate locations. Advanced registrations indicate that more than 1000 graduates and others will be in attendance at the Centennial Reunion.



*The Nighthawk Singers, a Crow Indian pow wow drum group from Lodge Grass, will be singing traditional Crow music at the Centennial Rendezvous in Red Lodge, July 8 at 2 p.m. Indian dancers will also be present to celebrate Montana's birthday.*

*The Rendezvous will also fly the flags of all the tribes and foreign powers that have claimed Montana soil. Other flags of fur trading companies and various historic colors will also be present.*

*Decendents of Touissant Charbonneau, the husband of Sacajawea, will be present at the opening ceremonies at 11 a.m. on July 1.*

A fund drive is underway to raise \$1500 for a fireworks display during the Reunion.

The Petroleum County history book is a project being sponsored by the Petroleum County Library Board. The official Montana Centennial logo and the state seal will be used on the preface page of the history book. The plan is to have the book delivered in time for the reunion of the graduates.

The Centennial logo will also appear on the Winnett schools' diplomas and the graduation programs.

Three Centennial projects will be held in the former D & E Cash Store building: The Winnett Quilting Club will have a quilt display; a committee is working on a Winnett High School All-Class Reunion antique museum; and an adult art class at WHS may have an art display.

An Old Timers' Reunion is being promoted to be held July 13 and 14, two days before the WHS reunion, at the old Joe Bagwell place on the west side of the Musselshell River at Mosby on Highway 200. The Old Timers' Reunion is sponsored by Mr. and Mrs. Duane Ostermiller of Billings and Mr. and Mrs. Mick Dundom. Mrs. Ostermiller is the former Joann Dundom, a graduate of Winnett High School.

Here's what you'll get and what you will bring to the Old Timers' Reunion: Come for four days (including July 15 WHS Reunion) of fun; renewing old friendships; seeing old pic-

# COMMUNITY CENTENNIAL CELEBRATIONS

tures you didn't know existed; playing games, tricks; talking, telling lies, truths, stories, tales; dancing. All those attending will chip in with food, cooking, cleaning up.

Important! There are no facilities at the Old Timers' site, except toilets. So, bring everything you need to rough it! Bring food, chairs, crafts, tables, campers. Bring the cook, skillet, games, drinks, ice cream freezers and ice. Bring all the old folks. Bring tents, hammocks. If you play music, we need you. Bring wash tubs, big pots and pans, water, tarps, ropes. Don't bring the dog. Bring help. Need a dance caller.

## SWEETHEARTS IN CAN-CAN REVIVAL

The Cattle Drive Sweethearts from Sidney, Montana will be participating in the Montana Centennial Can-Can Revival in Red Lodge. The Sweethearts are among the seven other dancing groups participating in the Can-Can Revival.

The Sweethearts were organized to help promote the Cattle Drive. They have performed their skits and dances for many organizations in the community, to help raise funds for the Montana Educational Scholarship in 1989.

The July 8th Saturday night Centennial Extravaganza will be a celebration of our western heritage, depicting the joys and trials of the men and women of the 1800s. Dancers from all over Montana, and as far away as California, Virginia, and Kansas, are registered and will bring excitement and color to the stage with their costumes and enthusiasm.

The Revival is sponsored in part by a grant from the Montana Statehood Centennial office and the Red Lodge Grizzly Peak-A-Boos. The Peak-A-Boos are a non-profit dancing group that travels across the State performing a Centennial show. Monies raised through the Revival and the sale of a Centennial garter, will go towards a scholarship fund for a Montana student.

The Peak-A-Boos encourage people who love to dance to participate in this historic event. The spots for groups have been filled, but individual participation is encouraged. If you love to dance, this is your ticket to participate in a Centennial activity.

For more information on the Can-Can Revival, write P.O. Box 934, Red Lodge, MT 59068, or call 446-3132 or 446-3141.

## FERGUS COUNTY VIDEO

The activities of the Fergus County '89ers are gaining recognition beyond the borders of Montana. Mr. Chan Biggs had a phone call from Mr. Charles Terry of Wichita Falls, Texas requesting a copy of the video tape that Mr. Biggs prepared for the '89ers. Mr. Terry said he had read about it in the *News Argus* of Lewistown, in one of the articles by the '89ers, and that some fellow Texans wanted to know more about Fergus County.

The Fergus County '89ers can't think of a better advertisement for the area than their tape. The narrative explains the county and its history. It touches on the Lewis and Clark expedition, the Charlie Russell National Wildlife Refuge, Charlie Russell country, the Metiz, the stone masons, Big Spring, which produces 63,000 gallons of 99.9% pure water per minute, Chief Joseph's retreat through the area, the Carroll trail, the gold and cattle industries, and the outstanding wild and scenic river along the Missouri Breaks.

## CATTLE, HERITAGE OF THE GALLATIN

"Cattle, Heritage of the Gallatin" is the title of a Centennial project of the Gallatin County Centennial Committee. Sculptor Jim Dolan has been commissioned to complete an existing sculpture of Nelson Story on Horseback by adding three metal steers to the arrangement. The sculpture is a lasting legacy of one of the major contributing developmental forces in the area.

The sculpture stands at the entrance to Lindley Park on the east end of Bozeman and will be enjoyed by tourists and residents alike.



A 350 ft. letter containing Madison County and Montana history was presented to the state by the fifth and sixth grade students of Twin Bridges, Harrison and Alder schools. All the students had a part in preparing the long letter. Pictured at the presentation, left to right: Ann Allen, teacher; Gov. Stan Stephens; Jeff Giles; Lt. Gov. Allen Kolstad; Brandy Miotke and Wade Brackett.

# JULY • CENTENNIAL • CALENDAR

1-8/28	Butte	Arts Chateau Show	723-7600	2	Havre	Class of '49,	
1	Lewistown	Horse Show	538-5292			Sunday in the Park	265-4383
1-4	Lewistown	Centennial Events	538-5292	3-4	Miles City	Free Somerfest	232-2890
1	Utica	Parade & Play Celebration		3	Bainville	Bainville Community Club	769-2404
		"Recalling Memories"	566-2272	3	Butte	Beard Contest;	
1	Windham	Dance & Box Social	566-2272			Dixieland Jazz Festival	782-7619
1-4	St. Regis	Centennial Celebration	649-2654	3-4	Ennis	Rodeo & Parade	682-4388
1	Virginia City	Pony Express Ride	843-5341	3	Harlowtown	Rodeo/Sculpture Unveiling	632-5752
1-4	Forsyth	Celebration	356-7301	3-4	Roundup	Parade; Show; Fireworks	323-2762
1-4	Butte	Celebration	494-4069	3	Baker	State Heritage Day	778-3336
1	Evaro	Mule Palace Concert		3	Sanders	Cent. Ball-Hysham School	342-5452
1-2	Polson	Sail Boat Race	883-9454	3-4	Harlowton	Western Celebration/ Rodeo	632-5752
1	Windham	Evening Dance & Box Social	566-2272	3-9	Wibaux	Diamond Jubilee/Pageant/	
1	Baker	Fifties Dance, American				Rodeo	795-2656
		Legion Club	778-3336	3	Butte	Church Concert & Fireworks	494-4688
1	Arlee	National Mule Marathon &	726-3828	4	E. Helena	Fun Day & Fireworks	443-4000
		Concert		4	Virginia City	Celebration	843-5341
1	Choteau	Demolition Derby,	466-2849	4	Culbertson	Park Dedication	787-5774
		Teton County Days		4	Lincoln	Celebration	362-4485
1	Plains	Celebration	826-3605	4	Glendive	Jaycee Parade; River Float	365-5601
1-2	Baker	Custer County Celebration/		4	Charlo	Parade	
		Antique Vehicles/Show	778-3336	4	Big Fork	Celebration	837-5888
1-2	Bridger	Pony Express Ride, 190 Mile		4	Great Falls	Dedications	
		Cody, WY-Livingston, MT	662-3387			Lewis/Clark Bronze	727-8314
1-2	Superior	Great Mullan Road Trek	822-4516	4	Hardin	Celebration; Demo Derby,,	
1-2	St. Regis	Softball Tournament, Golf Shoot,				Fireworks	665-1672
		Farm Machinery Exhibit	649-2654	4	Miles City	75th Anniversary Cain Family	
1-2	Lewistown	Fergus Co. Pageant; Parade,				Homesteading	232-3393
		Cent. Celebration	538-5292	4	Helena	Statewide Capitol Mock Election	
1-2	Red Lodge	Home of Champions Rodeo	446-2300			Primary	449-4725
1-2	Laurel	Cent. Days Celebration	628-8105	4	Terry	Centennial Rodeo	637-2177
1-2	Joliet	All Class Reunion	962-3790	4	Circle	Celebration, Fireworks,	
1-4	White Sulpher	Meagher Co Celebration,				Watermelon Feed	485-2414
		Gun Show, Music, Parade	547-3960	4	Great Falls	Fireworks	727-8314
1-4	Choteau	Celebration	466-2849	4	Missoula	Fit for America's Day	
1-8	Havre	Cent. Historical Bus Tour	265-4383			Runathon	251-3800
1-9	Red Lodge	Rendezvous	446-1119	4	Butte	Parade; Picnic	782-1266
1-2	Chester	Liberty Co. Cent Celebration	292-3524	4	Lima	Parade; Antique Car Show,	
1	Baker	Cent. Pageant & Dance	778-3336			Picnic, Fireworks	276-3258
1	Bannack	All Girl Pony Express Ride to		4	Chester	Minnesota Celebration	292-3524
		Virginia City	683-5511	4	Libby	Libby Heritage Day	293-5426
1-2	Baker	Antique Show/Auction	778-2354	4	Forsyth	Fireworks Celebration	356-2233
2	Plentywood	Raymond Reunion	765-1370	4	Helena	Old Time Fourth of July	442-4120
2	Stanford	Centennial Events	566-2272	5-9	Red Lodge	Can-Can Revival, Red Lodge	
2	Baker	Fallon County Days	778-3336			Grizzly Peak-A-Boos	448-1718
2	Polson	Players Season Opens	883-9454	5	Havre	Clack Museum Cent.	
2	Plentywood	Raymond Diamond Jubilee	765-1370			Lecture Series	265-9913
2	Baker	Plevna Peach Luth. Jubilee	778-3336	6	Libby	Deb Strohmeyer	
2-8	Helena	All-Nations Pow-Wow	443-5351			"Going Home To MT"	293-4528
2-9	Chinook	Chinook Cent. Celebration	357-2529	6-8/13-15	Great Falls	C.M. Russell Play	761-6700
2-29	Hamilton	100 Years of Porcelain Exh.	363-5067	6-8	Dillon	Law Enforcement Conference	683-5511
2	Stanford	Breakfast, Sunrise Church Ser.,		7-9	Dillon	Horse Show	683-5511
		Celebration	566-2272	7-9	East Helena	Centennial Rodeo & Parade	476-3311
				7-8	Virginia City	Square Dance Festival	843-5341
				7-8	Butte	Vigilante Rodeo	494-4069

# JULY • CENTENNIAL • CALENDAR

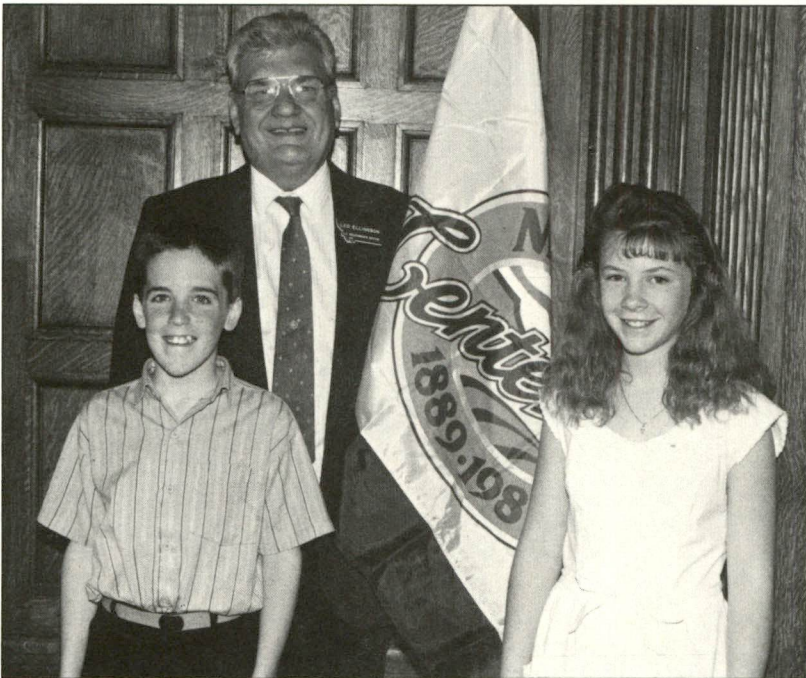
8	Simms	89'ers Strike Again	264-5815	15-21	Bozeman	Centennial Trek in Cent. Mtns.	586-1593
8	Wolf Point	10th Ann.I Human Stampede	653-1871	15-16	Stanford	Street Dance/Rodeo	566-2272
8	Drummond	Lower Valley Historical Soc.	288-3652	15	Chester	Liberty County Photo Contest	292-3524
7-9	Polson	Rodeo; Parade	883-5969	15-16	Helena	Central Montana	
7-9	Victor	Chief Victor Days	642-3751			Arabian Horse Show	227-8156
7-9	Belgrade	Barne's Steam & Power Show	388-4433	16	Malta	Church Celebration	654-2577
7-9	Dutton	Fun Days, Parade Car Show, Carnival	476-3311	16-28	Butte	Art Exhibits	494-5595
7-9	Wolf Point	Wild Horse Stampede	653-2012	16	Gardiner	Picnic	848-7563
8-9	Forsyth	Golf Tournament	356-2233	16	Richey	Rodeo, Richey Senior Citizens	773-5694
8	Monarch	Celebration	236-5352	16	Havre	"Sunday in the Park"	265-4383
8-9	Dillon	Arts Festival	683-5511	18-23	Townsend	Wrestlemania Tournament	266-4274
9	Havre	All Vets Day	265-4383	19	Havre	Clack Museum Lecture Series	265-4383
9	Butte	Square Dance Festival	723-8154	20	Libby	Logger's Days	
10	Great Falls	Youth Concert	761-6700			Can-Can Performance	293-8721
10-14	Dillon	Western MT Writers Conference	683-5511	20-22	Roundup	Tri County Fair	323-2762
10-21	Missoula	Bike; Big Sky Loop	721-1776	20-21	Butte	Shakespeare in the Park	494-4069
12-16	Billings	Trap Shoot	259-4537	21-30	Flathead Lake	Centennial Events	752-6166
13-15	Fairfield	Swim Day	467-2499	21-22	Polson	Fiddlers Contest	883-9454
13-16	Havre	Flower Arrangement Exhibit	265-4383	21-23	Red Lodge	Bear Creek All Class Reunion	446-2578
14-15	Three Forks	Three Forks Rodeo	285-3751	22-23	Three Forks	Lewis & Clark Pageant	285-3414
14-16	Plentywood	Sitting Bull Wagon Train Rendezvous	765-1370	22	Great Falls	Fireworks Display	761-8816
14-16	Malta	Celebration	654-1776	22	Roundup	Sheep to Shawl Spinoff	323-2346
14	Wolf Point	Art Fair; Shakespeare in Park	653-2012	22	Clancy	Foot Race	444-4912
14-16	Fairview	Reunion & Festival	747-5474	22	Kalispell	Sweet Adelines Concert	752-8821
14-16	Billings	Big Sky State Games	245-8106	22	Forsyth	River Duck Festival	356-2233
14-16	Elmo	Standing Arrow Pow-Wow		22-23	Butte	Gem Show	494-4069
14	Circle	County Jamboree	485-2414	22	Polson	Cherry Pit Spit	883-9454
14-15	Powell	Old Car Days	846-3111	22	Polson	Draft Horse & Milk Show	883-9454
14-15	Circle	Rodeo	485-2414	22	Great Falls	Official Centennial Parade	761-6700
14-16	Plentywood	Sitting Bull Rendezvous Days	765-1370	22	Fromberg	Cowboy-Cowgirl Reunion; Parade	668-7642
14-16	Bridger	Jim Bridger Days	662-3635	22-29	Great Falls	Centennial Focus Week	761-6700
14	Havre	Jesuit Priest Symposium	265-4383	22-29	Havre	Northern MT College Battlefield Tour	265-3700
15	Deer Lodge	Old Car Days	846-1882	22	Columbia Falls	Centennial Ball	892-2072
15	Darby	Celebration	821-3753	22	Great Falls	Malmstrom AFB Big Sky Day	761-6700
15	Townsend	Antique Car Show	266-3911	23-30	Billings	All School Reunion	259-9695
15	Three Forks	Rodeo	285-6857	23	Rolling	Buffalo Feed BBQ	
15-16	St. Regis	All Class Reunion	649-2654	23	Polson	Museum Centennial Day	883-9454
15-16	Lincoln	Flea Market & Bazaar	362-4485	23-29	Helena	All Nations Cent. Pow-Wow	443-5350
15-16	Winnett	Reunion	429-2901	23-29	Columbia Falls	Old Fashioned Campsite Revival	892-2409
15	Polson	Grand Opening-Golf Course; Wine Festival	883-9454	24-29	Lewistown	Central Montana Fair	538-8841
15	Fairview	Old Timers Festival	747-5474	24	Great Falls	Cascade Co. Variety Show	761-6700
15	Malta	Ranch Roundup Rodeo	654-2577	24	Great Falls	Golden Slipper Performance, Seniors Dance Group	452-4120
15	Gardiner	School Reunion	848-7563	24-25	Helena-Gt Falls	Good Sam RV Wagon Train	961-3171
15	Missoula	Parade	543-6623	24-29	Lewistown	Trade Show/Rodeo	538-5292
15	Alberton	Railroad Car Museum	722-4548	25	Great Falls	Sr. Citizens Celebration	727-7151
15	Dillon	Forest Retirees Reunion Picnic	683-5511	25	Great Falls	Old Time County Festival	761-6700
15-16	Bannack	Gold Panning Championship; Bannack Days	683-5511	25	Great Falls	Old Time Fiddlers Festival	453-9438
15-16	Ballantine	Homesteader Days	967-3395	26-30	Bozeman	Old Time County Fair	585-1405
15-16	Missoula	Art Show	543-6623	26	Havre	Clack Museum Lecture Series	265-4383
				27-28	Glendive	Historical Drama	365-5601

# JULY • CENTENNIAL • CALENDAR

27-30	Hardin	Youth Fair	665-1672	29-30	Teton County	Teton County Celebration, Jaycees Art on the Green	466-5856
27-30	Columbia Falls	Cent. Heritage Days	892-2072	29-8-6	Great Falls	MT Cent. State Fair of Excitement	727-8900
27-30	Helena	Last Chance Stampede & Fair	442-9810	29	Columbia Falls	Heritage Day Parade	892-2072
28-30	Cut Bank	Festival	873-5566	29-30	Phillipsburg	Flint Creek Valley Days	859-3269
28-30	Circle	H.S. Classes 68-70 Reunion	485-2414	30-31	Roundup	Cutting Horse Finals	323-2762
28-30	East Glacier	Lewis & Clark Days, Cent. Events/Fashion Show	873-2121	30	Kalispell	Flathead Cent. Airshow, Thunderbirds	752-6166
29-30	Three Forks	Lewis & Clark Pageant	285-3414	30	Plentywood	Men's Golf Tournament	765-1370
29	Lincoln	Tug of War	362-4485	30	Victor	Bitterroot Arts & Crafts Show	642-3172
29	Ingomar	Rodeo		30	Augusta	Old Timers Picnic, Parade/ Art Show/Picnic	562-9234
29-30	Butte	Ethnic & Art Festival	494-4069	31	Polson	Pro-Am Golf Tournament	883-9454
29	Polson	Jr. Horse Show	883-9454	31	Kalispell	Sweet Adelines at Conrad Mansion	752-6166
29-30	Polson	Arts and Craft Show	883-9454				
29-8-6	Great Falls	MT Cent. Derby Thoroughbred Horse Race	727-8900				
29-30	Whitefish	Flathead Valley Festival of Arts "MT in Song and Story"	862-1780				

## 1889 SILVER DOLLAR

Pauline Remmich of Boulder was a most welcome visitor at the Centennial Office recently. She brought with her a 1889 silver dollar she has had for many years. It was in mint condition. The staff of the *Montana '89er* tried in vain to figure out a way to reproduce that dollar in this issue. How do you photograph a silver dollar?



Winners of the Helena VFW essay contest were honored in the rotunda of the Capitol on May 1. Leo Ellingson, Centennial Director, presented the awards to Michael Downs (left), fifth grader, Hawthorne School. His teacher is Mrs. Michelle Abbey. Second place went to E. Dawn Creach, fifth grader, Rossiter School. Her teacher is Mrs. Cynthia Jewell. Michael read his essay to the large crowd assembled for the presentations.

## “HOW THE WEST WAS WAYWARD”

“How the West Was Wayward” will be presented by the Miles City Barn Players July 19-23 in Miles City. The Barn Players is a theatrical troupe which has written the play for the Montana Centennial. The play will use local talent of actors, singers, and dancers and all proceeds from the admission fee will be used to cover the costs of production and support the group’s other productions.

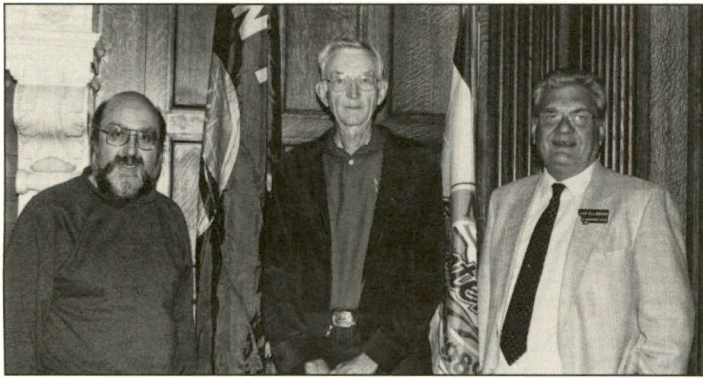
The play is a humorous look at Milestown, 1889. The purpose of the play is to entertain the people of southeastern Montana, all other Montanans and anyone who happens to be in Miles City during the production dates, July 19-23. The play will be performed at the Custer County High School Auditorium in Miles City.

Being a light-hearted melodrama, “How the West Was Wayward” will not be entirely based on facts historical to Miles City or Montana’s emergence as a state. It will, however, lightly touch facts surrounding Milestown’s past, and provide an evening of great entertainment.

The Barn Players, Inc., which has been a part of Miles City’s culture for nearly 40 years, has continually met the high standards of theatrical production it set for itself from the beginning. An accomplished troupe of amateur actors, costumers, set designers and most recently, playwrights, they have undertaken such theatrical giants as “Hello Dolly,” “Camelot,” and several other musical and non-musicals each year.



*Cast Members of “How the West Was Wayward”, left to right: Aggie Lemieux, Terry Sprague, Curt Hammond, John Halbert. back row: Jim Sprague and Heidi James.*



*IMPACT Kickoff: Improve Montana, Plant A Centennial Tree is a new Centennial project. The objective is to start a 10-year program to encourage the planting of trees in Montana. Each member of the Montana Legislature will be asked to plant a tree on the Capitol Complex to kickoff the program. Pictured above, left to right: Doug Giebel, Centennial Public Affairs Coordinator; Walter Anderson, Chairman of the Centennial Tree Project, and Leo Ellingson, Centennial Director.*

## Old West Comes Alive in Butte

by Rich Simpson  
Butte Standard Staff Writer

Hillcrest Elementary School in Butte took on the look of yesteryear to celebrate Montana's Centennial anniversary.

Students arrived at school dressed as card dealers, cowboys, miners, frontier women, backwoodsmen, and Jeanette Rankin, on the 100th day of the state's centennial year, 1989, said organizer Ann Thomas, a first grade teacher. The Hillcrest faculty planned to exchange the students' usual routine of reading, writing and arithmetic for lessons in weaving, square dancing, muzzle loading and flint knapping, she said. Flint knapping does not involve abduction, it's how the Indians made arrowheads and other tools out of stone.

Some older students, like those in Allen Kohler's sixth-grade class, also used the celebration as an opportunity to study the state's history. Students dressed up as a Montana person they studied and then made a speech on that individ-

## Extension Homemakers Support Centennial

Montana Extension Homemakers are proud of Montana's heritage and those values left to us by our forefathers and mothers one hundred years ago. They take to heart the words of famous western artist, Charles M. Russell who said, "to guard, protect and cherish our land, there's no afterlife for a place that started out as heaven."

Montana is the most northerly of the Rocky Mountain states, with a land area of 146,316 square miles and a water area of 822 square miles. About two-fifths of the state is mountainous and the remainder plains. Its population is 804,000 and in recent years has been called "The Big Sky Country" because of its huge expanse of sky.

With the Centennial in mind, Montana Extension Homemakers have planned to strengthen the ties of family, home and community. They will strive to promote Montana and its Centennial celebration. They look forward to creating a positive image of the Extension Homemaker programs throughout 1989.

Montana Extension Homemakers are in 289 clubs in 39 county councils with a membership of 4400.

During the latter half of 1988 a great rush of Centennial Homemaker activities began and have continued through in 1989. One of these was a project by State Citizenship Chairman, Margaret Fox of Laurel. Margaret's project was the "Buy a Book of Montana for Your Local School, Town or City Library." Other counties were encouraged to participate. Twenty-six counties have had 52 books donated with an estimated value of \$1100.



*The first grade class of Ennis Elementary School sang several selections at the 103rd birthday party for Century Citizen, Madge Low. The class is taught by Deanna Warwick.*

## MEET THE STAFF

### Lt. Governor and His Staff:



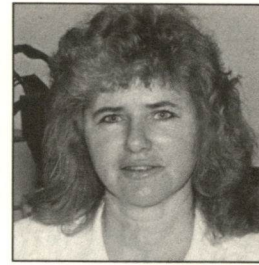
**Lt. Governor Allen Kolstad** is also the chairman of the Montana Statehood Centennial. Kolstad is the third chairman, following Lt. Gov. W. Gordon McOmber and George Turman.

Kolstad regards the Centennial as a golden opportunity to send a positive image nationwide, to gain international attention, and to increase awareness of our history at every level.



**John Kinna** is the Executive Assistant to the Lt. Governor. He was Superintendent of Schools at Fairfield for many years, and has retired after 31 years in education.

He is a fourth generation Montanan. His great grandfather was the first mayor of Helena.



**Denise Thompson** is the Executive Secretary/Office Manager in the Lieutenant Governor's Office. Denise performs administrative

duties for the Lieutenant Governor and the Centennial Office including: scheduling, purchasing, correspondence, and clerical functions.

### Centennial Staff:



**Leo D. Ellingson** is the Director of the Centennial Statehood Office. He was raised in the Glasgow area. He formerly

served as National Director of United Way Relations for USO in New York City, and as Regional Executive for the USO in Europe, Puerto Rico, Alaska and a majority of the United States.



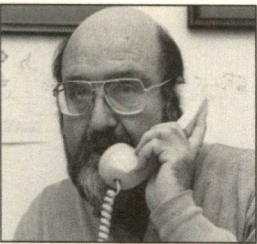
**Irvin Hutchison** is the new editor of the *Montana '89er*. He was a newspaper publisher in Chester for 40 years, and past

president of Montana Press Association. He has coordinated Lay Witness Missions in many churches of various denominations across Montana.



**Brian Patrick** is Field Operations Manager for the Centennial, besides working with sanctioning and grants. He will be travel-

ing the state assisting folks with organizing and sanctioning events. Patrick worked as a writer and public information officer for the Michigan Sesquicentennial from 1987 to 1988.



**Doug Giebel**, originally from Big Sandy, is Centennial Public Affairs Coordinator. He is in charge of new products and events bro-

chures and is arranging a Centennial picnic in New York City's Central Park.



**Judy Rolfe** joined the Centennial staff in January, coming to Helena with her husband Tom and their three children from

Bozeman. She is a native of Butte and has been active in civic, political and Centennial activities in her former home.



**Carolyn A. Linden**, Sanctioning Secretary. Carolyn has lived in Montana for 25 years. Before coming to the

Centennial Office, she spent 22 years in private business in a variety of positions. She hopes to graduate from Carroll College soon, with a degree in Business Administration



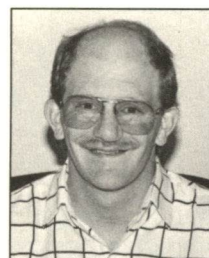
**Jeanne C. Amsberry**, Acres and Deeds Secretary. Jeanne is a long-time political worker, having started just out of high school.

She recently returned to Helena from Washington, D.C.



**Susan Worl**, Commission Secretary. Susan is responsible for budget/finance in the Centennial offices as well as Commission administration duties. Susan and

her family moved to Helena from Shelby two years ago.

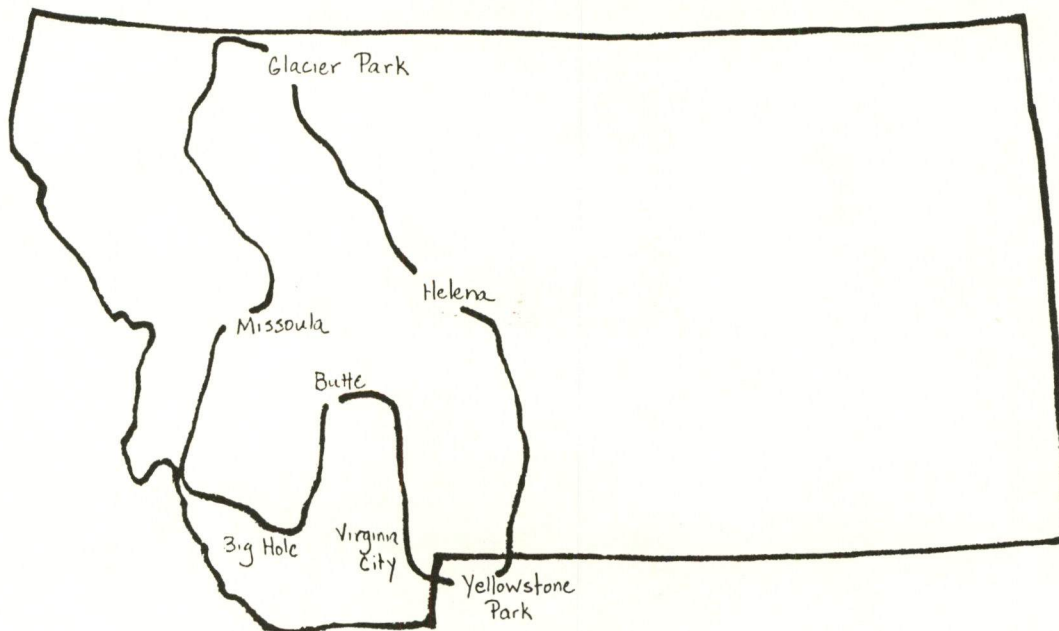


**Mark Copenhaver** is the newly appointed Centennial Float Coordinator. He is a 1987 graduate of Western Montana College, and has taught social studies at Geyser High School for the past two years.

Montana Statehood Centennial Office  
P.O. Box 1989, Capitol Station  
Helena, MT 59620

### Centennial License Plates

Montana Centennial License Plates are available at the office of the county treasurer in each of the 56 Montana counties. People who have already purchased their regular 1989 license plates can still get their Centennial plates. The cost is \$19.89, plus a \$3 handling charge.

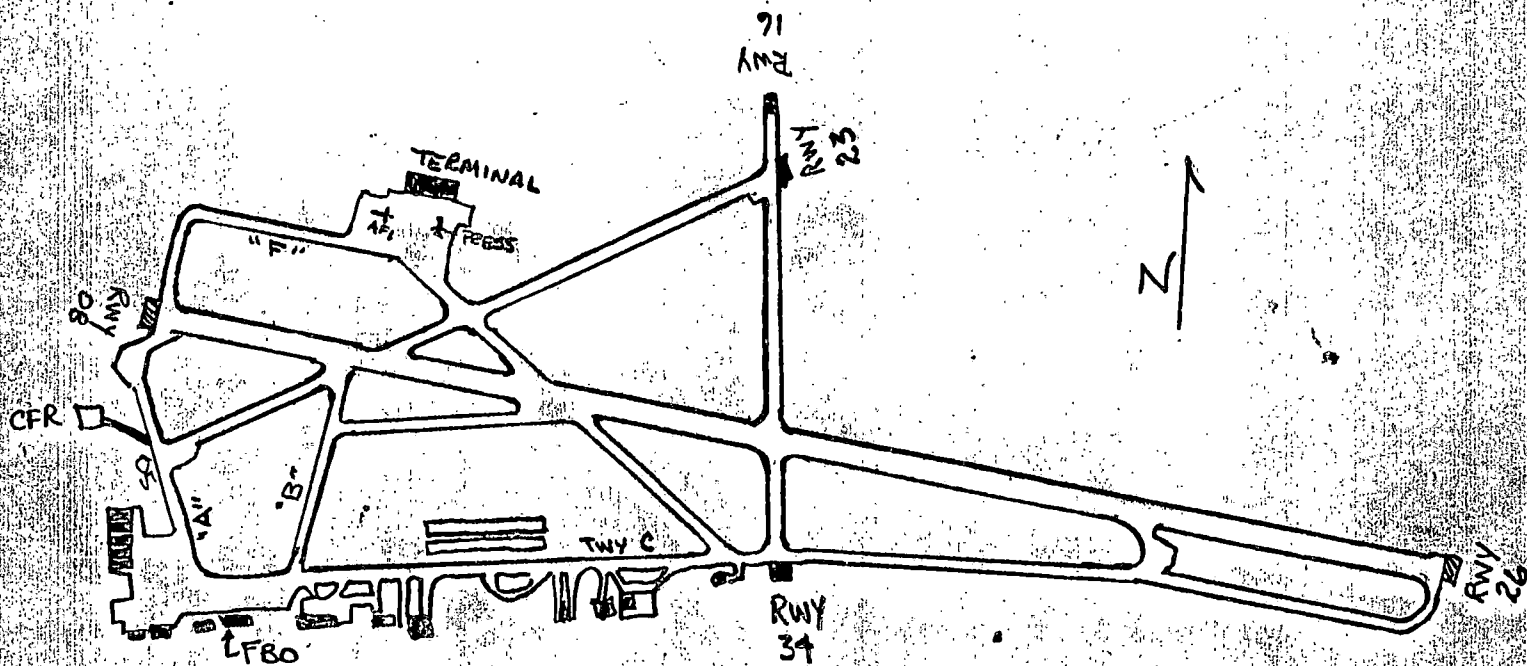


### 1,000 MILE BIKE RIDE

A 1,000 mile Centennial bike ride is underway through western Montana and west central Montana. Mileage is usually forty to fifty miles per day. The objective is to see Montana from a historical and recreational perspective. The dates are June 12 to July 8, and the route is shown on the map.

Call Montana Centennial Cyclists  
549-5824

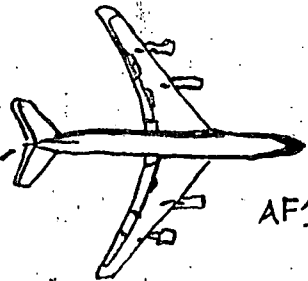
# HELENA REGIONAL AIRPORT



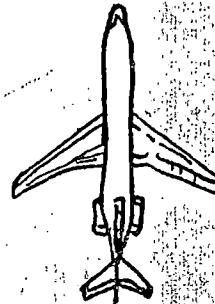
TERMINAL BLDG

GATE

PRESS



AF1



PRESS

TAXIWAY "F"

PROPOSED PARKING  
HELENA MONTANA

TAXIWAY "F"

---

# 1989 MONTANA

---

## CALENDAR OF EVENTS & CENTENNIAL EVENTS GUIDE

---



A guide to Montana's  
festivals, fairs, rodeos, shows, conventions and  
meetings, theatre and performing arts, sporting events,  
centennial activities and more.

---



# TABLE OF CONTENTS

---

Guide to Abbreviations	1
Centennial Highlights	2
Spring Calendar of Events <b>March, April, May</b>	4
Summer Calendar of Events <b>June, July, August</b>	9
Autumn Calendar of Events <b>September, October, November</b>	13
Winter Calendar of Events <b>December</b>	16
Local Chambers of Commerce	16

This calendar of events is designed to help you discover the activities and events Montana has to offer, as well as local events and happenings across the state. As you read through the calendar, you'll find a variety of sporting events, conventions and meetings, festivals, fairs, rodeos, shows, theatre, performing arts and much more.

For additional information about events, please contact the local Chamber of Commerce in the town where the event is taking place. You'll find a complete list in the back of this publication.

Listings show: date, event, facility name abbreviation and town.

Information compiled by the Montana Chamber of Commerce in cooperation with its members and local Chambers of Commerce. Produced, printed and distributed by Travel Montana, Department of Commerce.

At the time of publication, dates and events printed were accurate. However, we encourage you to contact your local Chamber of Commerce in the town where the event is taking place for verification and additional information.

# ABBREVIATIONS

ABT	Alberta Bair Theater	QU	Quality Inn	DS	Douglas Stadium
BB	Bridger Bowl	RH	Rainbow Hotel	HL	Huntley Lodge
BPHI	Billings Plaza Holiday Inn	RLM	Red Lodge Mountain	LIA	Logan International Airport
CAR	Carroll College	RLR	Red Lodge Resort	BSR	Big Sky Resort
CC	Civic Center	RMC	Rocky Mountain College	KHC	Kings Hill Campground
CGF	College of Great Falls	SGF	Sheraton Great Falls	McCP	McCormick Park
CI	Cottonwood Inn	SM	Southgate Mall	UMF	University Fieldhouse
CKI	Copper King Inn	TENT	Tentative	BSHS	Big Sky High School
CMR	C.M. Russell High School	UM	University of Montana	CTYP	City Parks
CMRM	C.M. Russell Museum	UT	University Theatre	DRNB	Dornblaser Field
COC	Chamber of Commerce	VS	Vigilante Stadium	DRNBF	Dornblaser Field
COL	Colonial Inn	WHC	Western Heritage Center	EQP	Equestrian Park
CP	Caras Park	*	Annual Event	FH	Fieldhouse
CS	Central School	WMC	Western Montana College	HSC	Hilini Sportsmen Club
CT	Children's Theatre	WB	War Bonnet	LDC	Lolo Dance Center
CVM	Copper Village Museum	VRL	Village Red Lion	LGC	Larchmont Golf Course
DM	Daly Mansion	RI	Ramada Inn	LL	Liberty Lanes
EAG	Eagles	PPL	Park Plaza Hotel	MT	Montana Theatre
EMC	Eastern Montana College	NH	Northern Hotel	SFS	St. Francis School
FG	Fairgrounds	MT	Montana	UGC	University Golf Course
FLL	Flathead Lake Lodge	MCCC	Miles City Community College	WGS	Washington-Grizzly Stadium
FM	Fort Missoula	GTI	Gran Tree Inn	WT	Washoe Theatre
FPT	Fort Peck Theater	SP	Sandhills Park	UMGC	University Montana Golf Course
FSA	Four Seasons Arena	LF	Legion Field	CS	Central School
FST	Front Street Theater	DT	Downtown	YCCL	Yellowstone County Courthouse Lawn
GFHS	Great Falls High School	YI	Yogo Inn	BSS	Big Sky Speedway
GML	Grouse Mountain Lodge	BM	Big Mountain	ASUM	Associated Student U of M
GST	Grand Street Theater	FHS	Fairmont Hot Springs	CCH	City Center Hall
HI	Heritage Inn	YAC	Yellowstone Art Center	DC	Depot Center
HMS	Helena Middle School	WPP	West Park Plaza	HV	Holiday Village
HS	High School	HI	Holiday Inn	LTSA	Lost Trail Ski Area
HSG	High School Gym	BST	Billings Studio Theatre	MCC	Meadowlark County Club
IWI	Isaak Walton Inn	SH	Sheraton Inn	MDM	Marcus Daly Mansion
JG	Jailhouse Gallery	AC	Arts Center	MR	Museum of the Rockies
JOR	Jorgensen's	HCTB	High Country Toyota Building	MSA	Marshall Ski Area
LHI	LeHavre Inn	MUSM	Museum	MST	Memorial Stadium
MAFB	Malstrom Air Force Base	GP	Gibson Park	MSDB	Montana School for Deaf & Blind
MCT	May Carol Theater	WP	Wadsworth Park	NGA	National Guard Armory
METRA	Metra Park	EJHS	East Junior High School	OGC	Overland Golf Course
M of A	Museum of Arts	WES	West Elementary School	OP	Overlook Park
M of R	Museum of the Rockies	FCC	First Congregational Church	PCM	Park County Museum
MS	Missoula Sheraton	KHG	Kings Hill Campground	PI	Ponderosa Inn
MSU	Montana State University	PGJH	Paris Gibson High School	RG	Rodeo Grounds
NMC	Northern Montana College	MHS	Montana Historical Society	VAC	Village Art Center
OI	Outlaw Inn	TFHGS	Thompson Falls High School Gym	SSA	Snowbowl Ski Area
PGS	Paris Gibson Square	PP	Pioneer Park	MA	Museum of Arts



# HIGHLIGHTS

1989 is Montana's Centennial year, and with it comes a host of activities and one-time special events that are sure to be unforgettable.

Take part in a celebration that won't come around again for another 100 years.

These 20 centennial events have been selected by Travel Montana to highlight Montana's centennial year.

**NATIONAL OUTDOOR SPEEDSKATING CHAMPIONSHIPS.** Butte. **January 28-29, 1989.** U.S. skaters compete at the U.S. High Altitude Sports Center for title of Outdoor National Champion.

**WHITEFISH WINTER CARNIVAL.** Whitefish. **February 3-5, 1989.** Three-day celebration of winter features torchlight skiing at The Big Mountain resort; fireworks and formal ball.

**C.M. RUSSELL AUCTION OF ORIGINAL WESTERN ART.** Great Falls. **March 16-18, 1989.** Three-day extravaganza of original western art features auctions, quick-draws, seminars, receptions and exhibitors' suites.

**MUSEUM OF THE ROCKIES & PLANETARIUM DEDICATION.** Bozeman. **April 1, 1989.** Dedication of the only public planetarium in a three-state region. Also world-class dinosaur collection, homestead history and contemporary Indian culture.

**BUCKING HORSE SALE.** Miles City. **May 19-21, 1989.** Wild horses are auctioned for the upcoming rodeo season. Horse races, bull riding, barbeques, fiddler contest.

**COLLEGE NATIONAL FINALS RODEO.** Bozeman. **June 12-17, 1989.** Nation's top collegiate cowboys and cowgirls compete for national titles in all rodeo events.

**RED BOTTOM CELEBRATION.** Frazer. **June 16-19, 1989.** Traditional Assiniboine Indian celebration at the Red Bottom Camp. Includes dancing contests and hand games.

**MONTANA TRADITIONAL JAZZ FESTIVAL.** Helena. **June 22-25, 1989.** New Orleans-style Dixieland jazz bands perform along downtown mall. All-star concert, Jazz Mass, parade, picnic and dancing.



**CENTENNIAL CELEBRATION DAYS.** Fort Benton. **June 23-25, 1989.** Dedication of the Montana Agriculture Center and Museum of the Northern Great Plains. Parade, street dances and art sales.

**CENTENNIAL RENDEZVOUS & CANCAN REVIVAL.** Red Lodge. **July 1-9, 1989.** Living history in the mountain man tradition, plus cancan dancers performing 1890's saloon-style dancing.

**CENTENNIAL WAGON TRAIN.** Helena. **July 3-4, 1989.** End of the trail for 100 wagon drivers who began their trip June 12 in Bannack. Campouts, dances and picnics along the route.

**WILD HORSE STAMPEDE.** Wolf Point. **July 7-9, 1989.** This is the Ganddaddy of all Montana rodeos. Includes carnival and parades.

**NORTH AMERICAN INDIAN DAYS.** Browning. **July 14-16, 1989.** Competitive and exhibition dancing draws tribal dancers from throughout U.S. and Canada. Other activities include rodeo, parade, all-Indian art show and sale.

**BANNACK DAYS.** Bannack. **July 15-16, 1989.** Celebration of mining and life in Montana's first territorial capital. Crafts, music, drama, black powder shoot.

**MONTANA CENTENNIAL PARADE.** Great Falls. **July 22, 1989.** The official Centennial Parade kicks off a week of events, including a musical pageant, band concert, costume ball.

**MONTANA STATE FIDDLERS' CONTEST.** Polson. **July 28-29, 1989.** top fiddle competition open to all ages. Jam sessions in Riverside Park and on the streets.

**MONTANA COWBOY POETRY GATHERING.** Big Timber. **August 18-19, 1989.** Daytime and evening performances with poets and musicians reciting backcountry ballads and rhymes of the range.

**GREAT MONTANA CENTENNIAL CATTLE DRIVE.** Roundup to Billings. **September 4-9, 1989.** Authentic drive with 10,000 cattle, 5,000 riders and 100 wagons. Concludes with cattle auction and "Cowboy Woodstock."

**NORDICFEST.** Libby. **September 15-17, 1989.** This logging town celebrates it Scandinavian heritage with food, music, dance, arts, crafts, and heritage show.

**ADMISSION DAY BIRTHDAY PARTY & BALL.** Helena. **November 8, 1989.** Birthday celebration and ball. Parties throughout the state, ranging from black tie to hoedown, linked by closed-circuit TV.



# SPRING '89

## MARCH CENTENNIAL EVENTS

1-31	Centennial Hat Show & Luncheon	Livingston
4	Red Lodge Mtn Centennial Celebration Ski	Red Lodge
4	*Winter Karnival Krazee	Red Lodge
4-5	John Mollish Memorial Ski Races	Anaconda
8	Statewide Women's Conference & Suffragat	Missoula
11-12	Joe McCarthy Memorial Wrestling Tourney	Anaconda
11-12	St. Patrick's Day Race	Anaconda
11-12	Winternational Boxing	MT Tech Butte
12	Centennial Talent Show	That Club Chester
12-17	1989 Western States J1 Fls Championship	Red Lodge
15-18	Western Heritage-Unveiling of Mural	SGF Great Falls
16-18	*21st Annual C.M. Russell Art Auction	Great Falls
17	Lewis & Clark Marionette Show	Kalispell
17	Echoes of the Past	Polson
18-19	Wayne Estes Memorial B-Ball Tournament	Anaconda
18-19	Don James Memorial Squirt Hockey Tourney	Anaconda
19-4/2	Centennial All School Art Show	SM Missoula
25	MT Repertory Theater-"Rainmaker"	Chester
30-31	Centennial Citizen's & Masters Race	Red Lodge

16	Career Tracks	SGF	Great Falls
16-17	*Speech Therapists Convention	WBI	Butte
16-17	*State Bar of Montana	WBI	Butte
16-18	Daughters of American Revolution	HI	Billings
17	*Southwest Angus Association	WBI	Butte
17-18	Mid Winter Eagles Convention		Lewistown
17-19	*MT Districts Council Assemblies of God	FHS	Anaconda
17-19	Associated Foods	HI	Billings
17-19	Helena Gymnastics Meet	COL	Helena
17-19	MT District Key Club	OI	Kalispell
17-20	*Gideons	FHS	Anaconda
18	*Toastmasters	WBI	Butte
18	Walleyes Unlimited Banquet		Havre
19-22	*United Food and Comm. Workers Union	FHS	Anaconda
21-22	Ag Day Farm Show	OI	Kalispell
23	Farmers Union Oil	SGF	Great Falls
24	Montana Federal Credit Union	HI	Great Falls
24-26	Holidaze Square Dancers	CKI	Butte
24-26	MT/Alberta Assoc. Fire Service Instructr	OI	Kalispell
28	Keye Productivity	SGF	Great Falls
28-29	Evangelical Pastors		Lewistown
29	Avon	CKI	Butte
29-31	A.W.W.A. and W.P.C.S.	HI	Great Falls
29-4/1	MT Educations Assn Delegate Assembly	COL	Helena
30-4/1	Future Homemakers of America	HI	Billings
30-4/1	Clark Fork Coalition	VRL	Missoula
31-4/1	Womens Missionary Union House Party		Lewistown
31-4/2	*Glacier Presbytery	FHS	Anaconda

## MARCH CONVENTIONS & LOCAL MEETINGS

1	MT Dental Association	HI	Bozeman
1-5	MT Aviation Trades	CKI	Butte
1-5	Nat'l Council Teachers of Mathematics	COL	Helena
2	*President's Council Meeting	CGF	Great Falls
2-3	*Montana Rural Water Association	HI	Great Falls
2-3	Golden Mean Society	VRL	Missoula
2-5	*MT Bar Examiners	FHS	Anaconda
2-5	*Christian Life Center	FHS	Anaconda
3-4	*MT Special Olympics Board	FHS	Anaconda
3-4	Christian Missionary Alliance Couples		Lewistown
3-5	Pacific N.W. Booksellers Association	OI	Kalispell
5-7	*Broad Valley Libraries	FHS	Anaconda
6-10	Fisheries Academy	HI	Bozeman
6-10	*Graduate Realtors Institute	HI	Great Falls
6-7	Governors Conference on Tourism	COL	Helena
6-9	Indian Education	SGF	Great Falls
7	Yellowstone Valley Electric Co-op	HI	Billings
7-10	Golf Course Supervisors of America	HI	Bozeman
7-10	American Chemet & Columbia Paint	COL	Helena
7-8	U S West Communications	COL	Helena
10-11	MT State Sheriff's Posse	CKI	Butte
10-12	*Yellowstone Conf. Utd Methodist Women	FHS	Anaconda
10-12	International Agriculture	SGF	Great Falls
11	N.W. Reading Conference	OI	Kalispell
12-14	D.E.A./Decca Congerence	CKI	Butte
12-15	Ryans Excecutive Conference/Buyers Fair	HI	Billings
13-17	Fisheries Academy	HI	Bozeman
14	GFGE Federal Credit Union	SGF	Great Falls
15-16	Rural Technical Assistance	VRL	Missoula
15-18	Indian Healath Services	HI	Bozeman

## MARCH FESTIVALS & SHOWS

1-6	Home Improvement Show	HI	Billings
2-4/14	Annual Children's Art Show	AC	Butte
4	Weight Watchers Style Show	HI	Bozeman
4	Craft Fair	CC	Helena
10-11	*Daughters of the Nile Style Show	HI	Great Falls
11-12	*Helena Spring Antique Show	CC	Helena
16-19	*Jay Contway & Friends Art Show	RH	Great Falls
16-19	*Native American Art Show	PI	Great Falls
16-19	*Western Heritage Artists Show & Sale	SGF	Great Falls
17	A.O.H. St. Patrick's Day Parade		Anaconda
17-18	*Valley County Ag Days		Glasgow
17-19	Antique Show	SGF	Great Falls
18	*National Ag Day		Choteau
18-19	*Sport Auto Rama	MAFB	Great Falls
19	Spring Music Festival	OI	Kalispell
20-21	*Flathead Farm Show		Kalispell
21-22	*Office Products Show	HI	Great Falls
24	*Lustre Schmeckfest		Glasgow
24	KATQ Farm Expo		Plentywood
30-4/2	*Kalispell Gun Show		Kalispell
31	*Lustre Schmeckfest		Wolf Point
31-4/2	Billings Gun Show	HI	Billings
31-4/2	Kalispell Gun Show	OI	Kalispell
36	*Easter Events	BSR	Big Sky



MARCH  
MISCELLANEOUS

1	James Hersch in Concert	ASUM	Missoula
2	*Casino Night		Polson
3-4/23	"Milton Avery" Yellowstone Art Center		Billings
3-5	*Kids and Family Fun Fair	HI	Great Falls
4	Moonlight Madness	HV	Great Falls
4	Monty Carlo Fun Night		Shelby
4-5	SB Rifle, Open Sectional 384 Pos.		Big Timber
5	Winter Wildlife Expedition		Gardiner
6	Junior Women's & Elks Club Chili & Pie	Elks	Livingston
6-10	*Spring Break	CGF	Great Falls
9	*March of Dimes bid for Bachelors		Billings
9-12	World of Wheels	Metra	Billings
10-11	Special Olympics	SGF	Great Falls
10-31	*Frances Denton Memorial Art Show		Deer Lodge
11	*Expanding Your Horizons	CGF	Great Falls
12	Winter Wildlife Expedition		Gardiner
16	Son's of St. Patrick Banquet	CKI	Butte
16	C. M. Russell Western Art Auction	HI	Great Falls
17	S.W. Montana Angus Association	CKI	Butte
17	St. Patrick Day Events		Butte
17	*Guild St. Patrick's Day Coffee	CGF	Great Falls
17-18	Truck Pull	FG	Great Falls
17-19	*MT Outdoor Recreation Expo (MORE)	Metra	Billings
18	*St. Patrick's Day Parade		Billings
18	*Crab Crack		Deer Lodge
18	*St. Patrick's Dinner & Tour	MDM	Hamilton
18	*Shriner's Clambake	CC	Helena
19	Winter Wildlife Expedition		Gardiner
21	Annual Appreciation Banquet	SGF	Great Falls
23-27	*Easter Observance	CGF	Great Falls
25	*Triangle Polled Hereford Breeders Sale	FG	Great Falls
25	*Budweiser Chili Cook-Off	HI	Great Falls
25-26	*Shrine Circus	FG	Great Falls
26	*Easter Services	CC	Helena
29	*Phil Eidel Bull Sale	FG	Great Falls
30	*Dela Open House		Deer Lodge
31-4/2	*International Bridge Tournament	Elks	Shelby

4	GFHS vs Butte/Bozeman Volleyball		Great Falls
4	CMRHS vs Butte/Bozeman Volleyball		Great Falls
4	Grizzly vs N. Arizona BB	FH	Missoula
5	Fireman's Challenge Race	Showdown	White Sulphur
5-6	*Maxville Trail Breaking-Snowmobile Ride		Deer Lodge
9-11	MSU vs Big Sky Conf. Tournament Mens		BB
9-11	State "B" Boys Basketball Tournament	FSA	Bozeman
10-12	*Doug Better's Winter Classis		Great Falls
10-13	Back Country Horseman		Whitefish
11	Big Brothers & Sisters Bowl for Kids		Kalispell
11-12	Bridger Bowl Ski Club Challenge	BB	Livingston
11-12	Northern Division Freestyle		Bozeman
11-12	Championship	Snowbowl	Missoula
11-12	Northern Div Freestyle Champion	Snowbowl	Missoula
12	MT Telemark Championship Series		Bozeman
12	Corporate Cup Race	Showdown	White Sulphur
16	Waitress Cup Race	BM	Whitefish
17-18	*Squirt Hockey Tournament		Butte
18	Pinhead Classic & Wood beam Memorial		Bozeman
18	Snofest '89	L TSA	Missoula
18	Snowmobile Poker Run		Virginia City
18	Bump-Bash Mogul Contest		Whitefish
19	World Wrestling Federation Wrestlemania		Billings
19	*Sundance Snowmobile Ride		Deer Lodge
19	Snowbowl Triathlon-5th Annual	Snowbowl	Missoula
21-22	Prof.Events Planners Office Products Sho		Great Falls
22-25	WIT B-ball Tournament		Lewistown
23-24	Regional Special Olympics		Red Lodge
24-26	National Indian Basketball Tournament		Havre
25	Best of the Bowl	Snowbowl	Missoula
25	SKOLF Tournament-Golf on Skis	Showdown	White Sulphur
25-26	Easter Weekend		Red Lodge
26	Mogal Championship	BB	Bozeman
26	KLYG-Pepsi Snowfest	L TSA	Hamilton
26	Easter Egg Hunt for Adults & Children	Snowbowl	Missoula
26	Easter Celebration		Whitefish
30-4/1	*Big Sky Figure Skating Competition	FSA	Great Falls
31	MSU vs Eastern Washington Univ. Tennis		Missoula
31-4/2	Beach Party Week-end		Whitefish

MARCH  
RODEOS & FAIRS

31-4/2	*Intercollegiate & High School Rodeo	FG	Helena
31-4/2	Regional Rodeo	FG	Helena

MARCH  
SPORTS

2	MSU vs Northern Arizona B-ball Men's	FH	Bozeman
2	GF High School vs CMR Volleyball		Great Falls
2	Grizzly vs U of Nevada Reno	FH	Missoula
2-4	State AA Boys Basketball	Metra	Billings
2-4	Easter "C" Boys Basketball Tournament		Glasgow
2-4	Boys C Divisional B-ball Tournament		Lewistown
3	MSU vs Weber State B-ball Women's	FH	Bozeman
3	Rocky Mountain College NCSA Race		Red Lodge
3-4	USSA Terrain Course Race	BSR	Big Sky
3-4	Divisional Girl's Volleyball Tournament		Big Timber
3-4	MT State Golden Glove Tournament	PGJH	Great Falls
3-4	West B Div Volleyball Tourney	RAM AC	Missoula
3-5	National Gelande Championship	Snowbowl	Missoula
4	MSU vs Univ of Nevada B-ball Men's	FH	Bozeman

MARCH  
THEATRE & PERFORMING ARTS

2	Performing Arts-Ridge String Quartet	ASUM	Missoula
7	GF Symphony Concert "Of Love & Lovers"		Great Falls
9	Performing Arts-Jazz Dance	ASUM	Missoula
9-11	CMR Musical		Great Falls
12	Arts League "Jazz Dance"		Choteau
12	Helena Symphony Chorale	CC	Helena
14	GF High School Concert		Great Falls
14	*Helena Community Concert	CC	Helena
15	Escora & Rado Community Concert		Havre
15-19	"The Prime of Miss Jean Brodie"	BST	Billings
16	Community Concert-Escosa & Rado	HC	Livingston
16	Community Concert "Earl Rose Trio"	HS	Shelby
18	Community Concert		Lewistown
22	Markham & Broadway Concert		Billings
31	The Rainmaker		Billings



## APRIL CENTENNIAL EVENTS

	Centennial Hat Show & Luncheon		Livingston
	Historic Homes Tour		Sidney
1	Art Club Art Auction/Dinner in Costume		Deer Lodge
1-5/28	Men's State Bowling Championship		Great Falls
11	Homeakers Centennial Meeting		Livingston
14-15	Centennial Art Show	CC	Plentywood
15	*Centennial Chili Cook off		Miles City
27	89ers Town Meeting Sun River		Great Falls
27-30	MT Cent. Ceramic Show	SGF	Great Falls
28	Ravalli County Centennial School Days		Hamilton
30	Centennial Fashion Review	CC	Plentywood

## APRIL CONVENTIONS & LOCAL MEETINGS

1-2	* Glacier Presbytery	FHS	Anaconda
2-5	MT Health Care Assn	COL	Helena
2-8	* Future Farmers Leadership Conference	HI	Great Falls
5-7	Airport Administrators	HI	Bozeman
5-8	Independent Insurance Agents of MT	COL	Helena
6-8	Intl Assn of Personnel Employment Servs	HI	Bozeman
6-8	Big Sky Girl Scout Council	VRL	Missoula
7-8	* MT Softball Association	FHS	Anaconda
7-8	Carquest	HI	Billings
7-8	Big Brothers & Sisters		Lewistown
7-9	* Safari Club	HI	Billings
8	MT Dental Assistants Assoc	HI	Bozeman
8	More Than Adam's Rib	CKI	Butte
10	Padgett & Thompson	SGF	Great Falls
10-11	Montana Social Rehab	VRL	Missoula
11-13	County Road Superintendents		Lewistown
11-14	MT Outfitters & Guides	COL	Helena
12-14	Montana Bankers Association	HI	Great Falls
12-14	MT Society of Respiratory Therapists Con	SGF	Great Falls
12-14	Northwest Regional Hospice Conference	VRL	Missoula
13-14	Speech & Drama Coaches		Lewistown
13-15	Montana Agate	HI	Bozeman
13-15	MT. Insurance Education Foundation	CKI	Butte
14-15	AA Assembly		Lewistown
14-16	* MT Newspaper Association/Ad Conference	FHS	Anaconda
15	* MT Food Distributors Association	FHS	Anaconda
17-18	Montana Bankers Association	HI	Great Falls
18	Career Track	WBI	Butte
18	American Federation of Secretary's	CKI	Butte
18-21	Western County Commissioners	SGF	Great Falls
19-20	Tri-Temple Shrine Cermonial		Bozeman
19-21	MT Dietitic Assn	HI	Bozeman
20-21	Youth in Crisis Conference	HI	Great Falls
21-22	Christian Missionary Alliance		Lewistown
21-22	Weight Watchers Northwest Region	VRL	Missoula
21-23	Delta Kappa Gamma Convention	OI	Kalispell
21-24	MT Cosmetologists	HI	Billings
22	Eastern Star	HI	Bozeman
22-23	Independent Order of Foresters	SGF	Great Falls
23-30	Lions International	OI	Kalispell
24-27	* Dept. of Fish Wildlife & Parks Law Enforc	FHS	Anaconda
25-26	Small Business Assistance Clinic	SGF	Great Falls
26	Avon	CKI	Butte

26	* 8th Annual Secretary Appreciation Prog.		Glasgow
26-27	MT Medical Records Assoc. Retreat		Lewistown
26-27	MT Hospital Engineers Association		Lewistown
26-29	* Big Brothers and Sisters	FHS	Anaconda
26-29	MT Assn. of Life Underwriters	HI	Billings
27-30	* MT Bankers Association	FHS	Anaconda
27-30	Continental Keil	HI	Billings
27-30	JoAnna's Ceramics Convention	SGF	Great Falls
28-29	* MT Transfer & Warehouseman Association	FHS	Anaconda
28-29	Good Sam's "Get Together"	FG	Hamilton
28-29	MT Big Sky State Hand Bell Festival		Lewistown
28-30	* Delta Kappa Gamma	FHS	Anaconda
28-30	MT PTA Convention	HI	Bozeman
28-30	* Nat. Assn. Women in Construction	HI	Great Falls
28-30	Center for Adolescent Development	COL	Helena
29	* MT Optometric Assistants Association	WBI	Butte
30-4/1	Future Homemakers of America	HI	Billings
30-5/1	MTEA	VRL	Missoula

## APRIL FESTIVALS & SHOWS

1	* Sweet Adelines Concert & Show		Billings
6	AFS Dessert & Art Auction	SGF	Great Falls
7-9	* Spring Carnival	BSR	Big Sky
7-9	* Glasgow Gun and Antique Show		Glasgow
7-9	Home & Garden Show	CC	Helena
8	* Trade Fair		Poison
14	* Hospice Ball	VRL	Missoula
16	* Helena Train Fair	CC	Helena
17-5/29	Watercolor Society Centennial Exhibit	AC	Butte
21	Trout Unlimited	CKI	Butte
21-23	BACC II Trade Show		Bozeman
28-29	* Cherry Blossom Festival		Poison
31-4/1	Billings Gun Show	HI	Billings

## APRIL MISCELLANEOUS

1	Grand Opening - Museum & Planetarium	MR	Bozeman
1	100 Years of Fashion Exhibit	MR	Bozeman
1	* Corvette Sock HOP	CC	Helena
1	Auction	DC	Livingston
1-2	SG Rifle, Jr. Sectional, 384 Pos.		Big Timber
4	SGHS Pre-District Music Concert		Big Timber
6-8	* Billings Home and Garden Show		Billings
7	Junior League Pitchfork Fondue	SGF	Great Falls
7	Quilt Show		Livingston
12-18	Billings Market	HI	Billings
14	Music Festival		Plentywood
15	Up With Kids		Anaconda
15-16	SB Rifle - 100 shot offhand		Big Timber
21-22	* BASH Auction	CGF	Great Falls
22	* Mallim Sef Clam Bake	FSA	Great Falls
22	* MAPRIL Cleanup		Great Falls
27	Assistance Business Clinic-Small Bus.		Havre
28-29	KYO Indian Conference & Pow Wow	UM	Missoula
28-30	* Weapons Show	CGF	Great Falls
29	* MAPRIL Cleanup		Great Falls
29	* KMTX Sock Hop	CC	Helena
29	* Trinity Hospital Antics		Wolf Point
29-30	* Billings Gem and Mineral Club Rock Show	Metra	Billings
29-30	* Antique Car Club Swap Meet & Show	FG	Great Falls



APRIL  
**RODEOS & FAIRS**

6-8	*MSU Spring Rodeo	FH	Bozeman
6-8	Montana State University Rodeo	MSU	Bozeman
14-16	University of Montana Rodeo		Kalispell
14-16	U of M College Rodeo	UM	Missoula

APRIL  
**SPORTS**

1	*Lone Peak Lookout Super Triathlon	BSR	Big Sky
1	GF High School Boys Track vs Skyview		Great Falls
1	CMR Boys Track vs Senior/West		Great Falls
1	MSU vs Washington State Univ. Tennis		Missoula
1	MSU vs University of Montana Tennis		Missoula
1	Red Lodge Mtn. Silver Run Race 50th Annv		Red Lodge
2	Pole & Paddle	BB	Bozeman
2	Big Brothers & Sisters Bowl-A-Thon		Butte
2	Belt Creek Headwater Relay		Showdown White Sulphur
5-6	North American Spring Series - Races		Whitefish
6	GF High School Girls Track vs Big Sky		Great Falls
6	GF High School Boys Track vs Big Sky		Great Falls
7	MSU Coaches Clinic	HI	Bozeman
7-9	*Spring Carnival	BSR	Big Sky
7-9	Ice Parade	CC	Butte
7-9	D.A.D. - Montana	BM	Whitefish
8	U of M Invitational Men's - Track	UM	Missoula
8	Hawaii Telemark Classic		Whitefish
8-9	*State YABA Bowling Association	WBI	Butte
8-9	Whitefish Ski-Golf Tournament		Whitefish
15-16	State AAU Wrestling Tournament	CC	Butte
16	Furniture Races		Whitefish
16-20	North American Ski-Yatching Championship		Whitefish
21	Area Tennis Invitationals		Great Falls
22	MSU Invitational Track Meet	FH	Bozeman
22	MSU Open Relay Meet - Track	MSU	Bozeman
22	GF Girls Track Invitational		Great Falls
28-29	Boccat Invitational Tennis		Bozeman
28-29	*G.F.F.S.C. Ice Show	FSA	Great Falls
28-29	GF Tennis Invitationals		Great Falls
28-29	GF Golf Invitationals		Great Falls
29	March of Dimes Walk America		Great Falls
29	CMR Girls Track vs Skyview		Great Falls
29	GFHS Girls Track vs Senior/West		Great Falls
30	May Day Run		Kalispell
30-4/1	*Big Sky Figure Skating Competition	FSA	Great Falls

APRIL  
**THEATRE & PERFORMING ARTS**

1	Treasure Statesmen Barbershop Chorus	CC	Great Falls
2	Colorado Children's Chorale Concert		Havre
2	"Around the World in Music"		Kalispell
3	Community Concert-The Limelights	DC	Livingston
4-6	Loose Ties - Fort Peck Perform. Arts		Wolf Point
7	"Loose Ties" (FLPeck Theater)		Glasgow
7	*Helena Series Event	CC	Helena
8	Bobby McFerrin Concert		Billings
8-9	GF Symphony "Giselle"	CC	Great Falls
9	*Music Department Spring Concert	CGF	Great Falls
12	*Community Concert	CC	Helena

13-15	*CGF Drama Class Production	CGF	Great Falls
14	Bobby McDuffy Concert		Billings
14-15	District Music Festival		Miles City
14-15	Highschool District Music Festival		Shelby
15	Arts League "MT Logging & Ballet Co."		Choteau
18	Performing Arts-Cabaret	ASUM	Missoula
19	*School Concert	CC	Helena
21	*Helena Series (Cabaret)	CC	Helena
22	*Symphony Pops Concert	CC	Helena
23	Butte Symphony Concert		Butte
24	Concert	CC	Helena
27-29	"The Red Shoes"	CGF	Great Falls
27-29	Center Stage Performance "Oliver"		Great Falls
27-29	GF High Schol Spring Play		Great Falls
30	*CGF Student Recital	CGF	Great Falls
30	"Musicke for the Kings & Queens of Eng."		Kalispell

MAY  
**CENTENNIAL EVENTS**

1	Old Fashion Branding Day		Chester
1	Law Day Centennial Activities		Havre
1-30	Cole Ranch Rodeo		Kalispell
1-5/28	Men's State Bowling Championship		Great Falls
5-7	Cowboy and Logger Days		Lolo
12	Conrad Mansion Antique Style Show		Kalispell
13	Heritage Days		Shelby
19-21	*World Famous Jaycee Bucking Horse Sale		Miles city
19-21	Garden City Centennial Ballet		Missoula
19-21	Next 100 Years in Science	SM	Missoula
20	Centennial All Military Ball	HI	Billings
25	Wagon Train Leaves for Bannack		Stevensville
26-28	Centennial Days at the Mansion	MDM	Hamilton
26-29	State Square & Round Dance Festival	EJHS	Great Falls
29	Westby Centennial Memorial Day		Westby

MAY  
**CONVENTIONS & LOCAL MEETINGS**

1-4	Western Gas Measurement	HI	Billings
1-5	*Association of Counties Convention	HI	Great Falls
3-4	Ford Service	SGF	Great Falls
3-5	MT Dental Assoc	HI	Bozeman
3-5	NARFE State Convention	OI	Kalispell
3-6	*MT Society of CPA's	FHS	Anaconda
3-7	MT Credit Union Network	COL	Helena
4	*CGF Guild Board Meeting	CGF	Great Falls
4-6	American Association Radiological Techs.	VRL	Missoula
5-6	MT Independent Bankers	HI	Billings
5-6	MT Toastmasters Assn.	HI	Billings
5-6	Neo Life	SGF	Great Falls
5-6	Knight's of Columba Convention		Livingston
5-6	Montana Pathology Society	VRL	Missoula
5-8	National Umpire School	HI	Billings
6-7	Civil Air Patrol		Lewistown
7-9	Tractor & Equipment Co.	HI	Billings
8-12	MT. Mining Association	CKI	Butte
9	Montana Power Stockholders Meeting	CC	Butte
9-12	American Fisheries	HI	Billings
10-11	Small Business Administration	OI	Kalispell
10-12	MT Assn of Realtors	COL	Helena
10-14	*MT Optometric Association	FHS	Anaconda
11-14	*American Heart Association Convention	HI	Great Falls



12	Midland Empire Reading Council	HI	Billings
12-13	Sheriff		Lewistown
12-14	MT Jaycees	HI	Bozeman
15-18	*MT Coroners Association	FHS	Anaconda
16-18	MT Beer & Wine Wholesalers	COL	Helena
18-19	*Montana Arbitrators Association	WBI	Butte
18-19	State Bar of MT	COL	Helena
18-20	MT Chiropractors	HI	Billings
18-20	Montana Committee for the Humanities	VRL	Missoula
18-21	*National Assoc. of Postal Supervisors	FHS	Anaconda
19	AA Round up	CKI	Butte
19-20	*District Regional Optimists	HI	Great Falls
19-20	Optimists	SGF	Great Falls
19-20	International Optimists	SGF	Great Falls
19-21	MT Womens's Bowlers	HI	Billings
19-21	Shiners	HI	Bozeman
19-21	MT State Pharmaceutical Assn	COL	Helena
19-21	Montana Physical Therapy	VRL	Missoula
20-21	MT Society CPA's	CKI	Butte
20-21	*Big Sky Buick Dealers Convention	HI	Great Falls
21	Crime Prevention Council	HI	Billings
22-23	MT Bankers-Commercial Conference	HI	Billings
24	AV	CKI	Butte
24	Career Track	SGF	Great Falls
25-26	MT. Arbitrators Association	CKI	Butte
26-29	*Big Sky Corvette Club Convention	HI	Great Falls
27-29	Helena Street Rodders	COL	Helena
30-6/2	*MT Society of Association Executives	FHS	Anaconda

MAY

FESTIVALS & SHOWS

	Reid Brothers Circus	FG	Helena
4-7	*Spring Auto Show		Kalispell
5-6	*Nemont/Agribition		Wolf Point
5-7	*Spring Home Show		Great Falls
6	*Anaconda Copper Village Art Auction	FHS	Anaconda
6-7	*Home, Sport & Craft Show		Hamilton
6-7	*Artists & Craftsmen of the Flathead		Kalispell
12-14	KTYM Trade Show	CC	Butte
12-14	*Antique Extravaganza	CC	Helena
20-22	*Canadian Days		Glasgow
26-29	*Polka Fest	HI	Billings
28	*Youth Open Horse Show		Kalispell
29	*Old Trail Museum Flea Market		Choteau

MAY

MISCELLANEOUS

	*Pioneer Museum		Glasgow
	*PowerHouse Tours (Ft.Peck)		Glasgow
	Inland Empire Carnival	FG	Helena
	*Park County Museum Opens for 1989 Season		Livingston
1-31	Collection of W.A. Clark-Yellowstone Art	PCM	Billings
2	*MSDB Arbor Day Music Program	MSDB	Great Falls
4-6	*Mayfair	HI	Billings
6	*Champagne Art Auction	FHS	Anaconda
6	*Trout Unlimited	HI	Bozeman
6	*IOF Dance	FSA	Great Falls
6	*MAPRIL Cleanup		Great Falls
6	Square Dance	Elks	Shelby
6-7	Rythemettes	CKI	Butte
6-7	Butte Central Acution	CC	Butte

12-13	Faith Chapel	HI	Billings
13	*Soroptimist Home Tour		Choteau
13	*Graduation	CGF	Great Falls
13	*MAPRIL Clean Up		Great Falls
18	*President's Council Annual Dinner	CGF	Great Falls
20	Sunrise Sale	HV	Great Falls
20	*Glacier Street Rod Spring Cruise		Kalispell
20	Depot Center Opens for 1989 Season	DC	Livingston
20-22	*Canadian Days		Kalispell
22	*Summer Sessions begin	CGF	Great Falls
23	Edmonton Co-op	SGF	Great Falls
26	Creative Vacations	HI	Bozeman
26-28	Outlaw Sectional Bridge Tournament	OI	Kalispell

MAY

RODEOS & FAIRS

5-7	Dawson Community College Rodeo		Glendive
19-21	Northern Montana College Rodeo		Havre
19-21	*Bucking Horse Sale		Miles City
26-28	Eastern Montana College Rodeo		Hardin
27-28	*Frontier Days		Culbertson

MAY

SPORTS

6	CMR High School Track vs Helena		Great Falls
6	Invitational Tract Meet-Cowboy/Cowgirl		Miles City
8-13	District C Track Meet		Miles City
10	MSU vs U of M Track Meet	FH	Bozeman
10	U of M - Track	MSU	Bozeman
12	CMR High Track vs GFHS		Great Falls
12	High School Tennis Divisionals		Great Falls
16-19	*Montana Special Olympics		Kalispell
18-21	Stumptown Days		Whitefish
19-20	High School Golf Tournament-State		Great Falls
19-20	MSDB Games for Visually Impaired	MSDB	Great Falls
19-20	A/B/C Divisional Tennis Tournament		Miles City
19-20	Divisional B Track Meet		Miles City
21	*Elk's Golf Tournament		Shelby
26-27	Montana State AA & B Track Meet	Metra	Billings
26-27	A/B/C State Tennis Tournament		Miles City
27	*St. Vincent Hospital Heart & Sole Series		Billings
27	*Spring Horseback Poker Run		Virginia City

MAY

THEATRE & PERFORMING ARTS

1	Musicale & Tea AAUW		Hamilton
1	*George Winston in Concert	CC	Helena
4-6	"The Red Shoes"	CGF	Great Falls
4-6	Center Stage Performance "Oliver"		Great Falls
6	Performing Arts-Sweet Honey in the Rock	ASUM	Missoula
9	GF Symphony "Rogers & Hammerstein Night"		Great Falls
12	Brdo Becardi Tamburitza Orchestra	WT	Anaconda
13	Symphony-Pops Concert	HI	Billings
13-20	"South Pacific"		Billings
22-23	GF High School Honors Concert		Great Falls
26-27	George Winston-Alberta Blair Theater		Billings
30	CMR Jazz Concert		Great Falls

# SUMMER '89

## JUNE CENTENNIAL EVENTS

1-30	Cole Ranch Rodeo		Kalispell
3	Greater Montana Brewers' Cup		Missoula
3	Old Car Show	CC	Plentywood
3-4	Centennial Party	CC	Helena
3-4	Centennial Trap Shoot	FG	Plentywood
10	1869 Cottonwood City opening		Deer Lodge
11	Old Tractor Club-Centennial Gas Up	FG	Plentywood
15-7/15	Local Artist Display	VAC	Chester
16-17	*Western Days with Centennial Parade		Billings
17	Canadian Mounted Police Parade		Shelby
17-18	Centennial Golf Roundup		Plentywood
18	Parade of Centennial Fashions		Livingston
18	Judging of Beard Contest		Livingston
18	100th Party for Northern Pacific Caboose	PCM	Livingston
22	"Pamela" a Montana Opera		Billings
22	89ers Town Meeting		Great Falls
23-25	All School Reunion		Power
23-25	Sidney's Centennial Celebration		Sidney
24	Pony Express Mail Carry		Terry
24-25	MT Statehood Centennial Airshow		Bozeman
24-25	Hot Air Balloon Rally		Miles City
24-25	All Redstone Centennial Reunion		Redstone
28	All Corners Trap Shoot		Laurel
28	2nd Annual Big Mountain Ice Cream Social	BM	Whitefish
29-7/1	Belle of Amhurst	BM	Whitefish
30	Glenda Bell - "Clarity Jane"		Chester
30	Centennial Rendezvous		Laurel
30-7/1	Black Robe Mission Project		Choteau
30-7/2	MT Centennial Rod Run-Bigs St. Rod Assn		Billings
30-7/3	Montana State Chamber Golf Tournament		Kalispell
30-7/4	Nez Perce Trail Ride		Chinook

## JUNE CONVENTIONS & LOCAL MEETINGS

2-3	Eastern Montana Bankers Conference		Sidney
2-4	MT Logging Association	OI	Kalispell
2-5	Nat'l Assn of Postmasters of the U.S.A.	COL	Helena
4-8	MT Branch-Nat'l League of Postmasters	COL	Helena
6-7	MT Ore Diggers		Lewistown
7-11	*Agri Basics Conference	FHS	Anaconda
7-11	Telephone Pioneers	HI	Billings
8	MSU Alumni Dinner	HI	Bozeman
8-10	*T.O.P.S. Convention	WBI	Butte
8-10	MT State Association of Letter Carriers	CKI	Butte
8-10	Rotary District 539 Convention	OI	Kalispell
9-10	MSU Alumni Meeting	HI	Bozeman
9-10	Exchange Club	VRL	Missoula
9-11	Montana Lutheran Church	SGF	Great Falls
9-13	Job's Daughters	COL	Helena
11-13	MT Cosmetologist Assoc	HI	Bozeman
11-13	*PEO Convention	WBI	Butte
12	MT Society of CPA's	CKI	Butte

12-14	MT Assoc of Conservation Districts	HI	Bozeman
13-17	State VFW Convention		Glasgow
13-17	Eagles State Convention		Lewistown
13-19	Grand Chapter Order of Eastern Star	CC	Helena
14-16	MT Assoc. of Pupil Transportation	HI	Bozeman
14-17	*MT. Volunteer Fire Fighters Convention	HI	Great Falls
15-16	Montana Nursing Directors	SGF	Great Falls
15-17	*Deaconess Sports Classic	HI	Billings
15-18	*Montana Tech Coaches Clinic	FHS	Anaconda
15-19	*Monida Chapter of ex-FBI Agents	FHS	Anaconda
16-18	*Watchtower Society District Meeting	Metra	Billings
17	MT Public Employees Assoc.	OI	Kalispell
17-20	*MT Funeral Directors Convention	HI	Great Falls
18-22	MT Assoc of Counties	HI	Bozeman
19	Career Track	SGF	Great Falls
20-25	*MT Family Physicians	FHS	Anaconda
21	Avon	CKI	Butte
21-24	MT Society of CPA'S	HI	Billings
22	Assistance for Business Clinic	MCCC	Miles City
22-23	*State Bar of Montana Convention	HI	Great Falls
22-24	MT Shortland Reports Association	SGF	Great Falls
23-24	Masonic Lodge Convention		Miles City
23-25	Beta Sigma Phi	COL	Helena
24-25	Montana Gem & Rock Show		Lewistown
24-28	MT Bankers Convention	HI	Billings
25-28	MT State Veterinarian Medical Assoc.	SGF	Great Falls
26-7/1	Continuing Education	VRL	Missoula
28-7/4	Wally Byam Caravan & Rally		Bozeman

## JUNE FESTIVALS & SHOWS

2-3	*Fort Union/Western Days		Sidney
2-7/13	Montana Interpretations	AC	Butte
9-11	*Helena Gun Show	CC	Helena
10-11	*Paint Horse Show		Kalispell
11	*Dinosaur Days (Old Trail Museum)		Choteau
15-17	*Red Bottom Indian Celebration		Glasgow
15-18	*Arabian Horse Show		Kalispell
16-18	*Midland Empire Horse Show	Metra	Billings
22	Gallatin Dog Club Show	Sacajawea	Livingston
24-25	Stevensville Western Days		Stevensville
25	*2nd Annual GF Railroad Show	RH	Great Falls
25	Park County Parade of Fashions	PCM	Livingston
28-29	*Shrine Circus	Metra	Billings
30-7/1	*Miss Montana Pageant		Billings
30-7/2	*Miss Teen of Montana Pageant	HI	Great Falls

## JUNE MISCELLANEOUS

	*Pioneer Museum		Glasgow
	*PowerHouse Tours (Ft. Peck)		Glasgow
	Plays in Park & A Sing Along		Livingston
1-30	Collection of W.A. Clark	YAC	Billings
2	Eastern MT College Senior/Faculty Dinner	HI	Billings
2-3	Miss Montana National Pre Teen	CKI	Butte
2-3	Black Robe Mission Trail Begins	St. Mary's	Stevensville



3	* Eastern Montana College Graduation	Metra	Billings	9-11	MT State Softball Hall of Fame		Lewistown
3	Plains Days		Plains	10-1	1 *Kiwans Open Horse Show		Choteau
3-4	Centennial Party	CC	Helena	10-11	* Spring Handicap Golf		Deer Lodge
5	* Telecom Classes Begin	CGF	Great Falls	16	* All-Star Girl's B-ball Classic	MT Tech	Butte
5	* Summer Session	3 Begins	CGF	17	* American Youth Classic Run		Kalispell
7-10	Class of '49 Reunion	HI	Billings	17	Great Lake to Lake Canoe Race		Whitefish
10	Range Riders Museum 50th Annv. Party		Miles City	17-18	Skins Tournament	OGC	Big Timber
11-17	* Business Week '89	MSU	Bozeman	17-18	Oilfield Golf Handicap		Shelby
15	Historical Program Series	PGS	Great Falls	18	* Great Lake to Lake Canoe Race		Kalispell
16	* Master of Human Services Classes			18	* Summer Solstice Triathlon		Kalispell
	Begin	CGF	Great Falls	24	* 4th Annual Chamber Golf Tournament		Polson
16-18	Miss Montana/American Coed	VRL	Missoula	24	Whitefish Lake Run		Whitefish
17	St Marie Grand Opening		Glasgow	30-7/2	Golf Classic		Kalispell
17-18	Motorcycle Rally-Big Sky Tourmaster		Lewistown				
17-19	Bannock to Virginia City Wagon Train		Virginia City				
18-24	Car Rally State Tour (Cars 66 & older)		Miles City				
19-21	Airstream Caravan		Glasgow				
20-25	* Buffalo Hunter's Black Powder & Muzzle		Virginia City	8-9	Center Stage Musical Production	CGF	Great Falls
22-23	Air Stream		Lewistown	9	* Virginia City Opera House Opens		Virginia City
22-25	Sectional Bridge Tournament	CKI	Butte	13-8/24	"PYIE: The Legend of Star Boy"	CC	Great Falls
22-26	Billings Market	HI	Billings	15-24	Center Stage Musical Production	CGF	Great Falls
23	Shrine Circus		Wolf Point	24	Mont. Celebrates "Once Upon A Lifetime"		Miles City
23-24	Montana Made Products at West Park		Plaza				
			Billings				
23-25	* Red Bottom Celebration (Pow Wow)		Wolf Point				
23-7/1	Fine Art Show - Rimrock Mall		Billings				
24	Michigan Unit - Wally Byam Dinner	HI	Bozeman				
24	Tri County Farm Bureau			1	Montana Chamber Celebrity Golf		
	Centennial	Stemman's	Stevensville	1	Tourney	OI	Kalispell
30	China I - Wally Byam Breakfast	HI	Bozeman	1	5K, 10K, & 1/2 Marathon		Laurel
30	Tampa Bay - Wally Byam Lunch	HI	Bozeman	1	Parade		Laurel
30	Butte High Class 1959 Reunion	CKI	Butte	1	Sky Diving Exhibition		Laurel
30-7/1	Butte Central Class of 1969 Reunion	WBI	Butte	1	All Class Reunion Dance		Laurel
				1	Recalling Memories Celebration		Utica
				1-2	Liberty County Centennial Days		Chester
				1-30	Cole Ranch Rodeo		Kalispell
				1-4	Joliet All Class Reunion		Joliet
				1-4	Military Fair		Laurel
				1-4	Official Fergus County 89ers Celebration		Lewistown
				1-8	Chinook 100 Year Centennial		Chinook
				2	Celebrate America-Musical Drama & Picnic		Billings
				2	Baseball Tournament		Laurel
				2	Clarity Jane Players		Laurel
				2	Community Church Service		Laurel
				2	Raymond Centennial Reunion		Raymond
				2	Judith Basin Roundup & Centennial Events		Stanford
				2-4	Livingston Chamber Round-up		Livingston
				2-4	Parade (Centennial Theme)		Livingston
				3	Threshing Bee - Dance		Choteau
				3	Centennial Chantuaqua		Kalispell
				3	Rock Concert		Laurel
				3	Jaycee's Street Dance		Laurel
				3	Registration opens County Centennial		Wibaux
				3-4	Centennial Wagon Train	FG	Helena
				4	Rodeo - Parade-Fireworks		Choteau
				4	Dedication of Lewis & Clark Statue	OP	Great Falls
				4	Jaycee Pancake Breakfast		Laurel
				4	4th of July Celebration		Laurel
				4	Fort Missoula July 4th Celebration		Missoula
				4	Old Time Picnic & Variety Show		Wibaux
				5-6	Family & Class Reunions		Wibaux
				7	Historical Pageant		Wibaux
				7-9	Dutton Fun Day		Dutton
				8	Parade, Barbeque, Rodeo & Street Dance		Wibaux
				9	Silver Beaus & Bells Square/Round Dance		Butte

JUNE

THEATRE & PERFORMING ARTS

JULY

CENTENNIAL EVENTS

JUNE  
RODEOS & FAIRS

2-3	* Richland County Youth Rodeo		Sidney
3-4	* District 5 High School Rodeo		Polson
10-11	* District High School Rodeo		Choteau
13-17	College National Finals Rodeo	FH	Bozeman
17	* Wilsall Rodeo		Wilsall
17-18	* Rocky MTN Outfitters Rendezvous		Townsend
22-25	Montana State High School Rodeo		Glasgow
23	Colstrip Days Games in the Park		Colstrip
23-24	* All American Days		Glendive
24	Rodeo		Colstrip
24-25	Gardiner Rodeo		Gardiner
25	Local Foot Race		Colstrip
25	* Ophem Rodeo		Glasgow
30-7/1	* Big Timber Rodeo & Fireworks		Big Timber

JUNE  
SPORTS

	* Stock Car Races (Ft. Peck)		Glasgow
2-3	* Governors Cup	CC	Helena
3	Meet Champions - Memorial Stadium		Great Falls
3	* Community Memorial Hospital Fun Run-9th		Sidney
5-9	National AAU Wrestling Tournament	Metra	Billings
8-10	Whitefish Lake Fishing Derby		Whitefish
9	Pro-Am Golf Tournament	OGC	Big Timber
9-10	* St. Vincent Hospital Memorial Golf Trmnt		Billings
9-10	Celebrity Golf Tournament		Lewistown

9	Community Breakfast & Church Service	Wibaux	19-21	* Montana State Firemen's Assoc. Conven.	WBI	Butte
10-11	Rendezvous-(SEE ALL SITTING BULL ENTRIES)	Sask. Canada	21	* MT State Retired Firefighters Assoc. Con	WBI	Butte
10-11	Sitting Bull Wagon Train Lvs Willow Bnch	Sask. Canada			HI	Bozeman
13-15	MT Swim Day - Parade - Events	Fairfield	24-28	MSU - College of Agriculture		Lewistown
14	Jesuit "Black Robe" Trail	Havre	26	U S Geological Survey	FHS	Anaconda
14	Sitting Bull Train Arrives	Redstone	26-29	* Port of Montana		Billings
14-16	Stillwater Homecoming Centennial	Columbus	29-30	* Balloons Over Billings	OI	Kalispell
14-16	Old Timers Reunion & Summer Festival	Fairview	31-8/3	S.R.S. Welfare Research & Statics		
14-16	Old Time Dress Up Contest	Fairview				
14-16	Antique Car & Tractor Show	Fairview				
14-16	Health Fun Run	Fairview				
14-16	Horseshoe Tournament	Fairview				
14-16	Baseball Tournament	Fairview				
15	Western Montana Centennial Parade	Missoula	1	* Townsend July Festival-Car Show-Flea Mkt		Townsend
15-16	State Gold Panning Championship	Bannack	1-2	Whitefish Arts Festival		Whitefish
15-16	Old Car Days & Grant Kohrs Birthday	Deer Lodge	1-4	* Miss Teen of Montana Pageant	HI	Great Falls
15-16	Hellgate Rendezvous & Jubilee	Missoula	2-3	Arlee Pow Wow		Arlee
16	Sitting Bull Train Arrives	Plentywood	3	Depot Center Festival of The Arts	DC	Livingston
19	Broadway Reveu	BM	3	* Fireworks Big "M"		Butte
21-23	Centennial Arts&Crafts Festival-Roberts	Billings	4	* Dixieland Jazz Festival		Butte
21-23	Cottonwood Ranch Art Show	Roberts	4	* Fourth of July Festivities	BSR	Big Sky
22	Statewide Centennial Parade	Great Falls	4	* Parade, Derby		Glendive
22	Centennial Ball	FSA	4	Northwest Modified Double Hitter	BSS	Kalispell
22	Big Sky Day	MAFB	4	4th of July Celebration		Miles City
22	All Faith Worship Service	GP	4	* Virginia City Fireworks		Virginia City
23	Ethnic Day-Black Eagle Community Center	Great Falls	4	Whitefish Fourth of July		Whitefish
23	Four County Melodrama	Shelby	5-7	Can-Can Dancers Centennial Review		Red Lodge
23	Classical Concert	BM	7-9	* Artists & Craftsmen of the Flathead		Kalispell
24	Centennial Variety Show	CC	8-9	New Age Fair	OI	Kalispell
24-25	Good Sam RV Wagon Train, Helena to GF	Great Falls	14-16	* Elmo Pow Wow		Elmo
25	Old Time Fiddlers Festival	Great Falls	15	* Fairviews Oldtimers Celebration		Sidney
25	Centennial Senior Celebration	CGF	16-28	Arts Chateau's MT Centennial Exhibit	AC	Butte
25	Old Fashioned Country Festival	CGF	17-18	* 4-H Fair & Livestock Show		Choteau
26	Band Concert-Youth Heritage	Great Falls	19-31	Flathead Festival		Whitefish
	Day-Picnic	GP	19-31	* Whitefish Summer Art Walk		Whitefish
27-28	Centennial Pageant	CC	20	* Shine Circus		Kalispell
28	Pet & Doll Parade	Great Falls	21-23	Butte Mineral & Gem Show	CKI	Butte
28-29	* MT State Fiddlers Contest	Polson	21-23	* Hockaday Art in the Park		Kalispell
29	Centennial History Fair	Great Falls	22	* Open House Air Show	MAFB	Great Falls
29	Montana Centennial Derby Trials	Great Falls	22-23	* Gem Show		Butte
29-30	Flathead Festival	Kalispell	22-23	* Governor's Cup Horse Show	FG	Helena
29-30	Flint Creek Valley Days Celebration	Phillipsburg	24-25	Old Fashioned Country Festival	CGF	Great Falls
30	Centennial Air Show	Kalispell	29	* Cherry Festival & Pit Spit Contest		Polson
30	Men's Centennial Invitation Golf Tourmt	Plentywood	29-30	* Art-on-the-Green		Choteau
			29-30	Antique and Coin Show	OI	Kalispell
			30	Sweet Adelines Ice Cream Social	CM	Kalispell

## JULY FESTIVALS & SHOWS

## JULY CONVENTIONS & LOCAL MEETINGS

2-6	Farmers Union Insurance	FHS	Anaconda
5-8	American Legion State Department Conven.		Havre
10-12	Montana State Credit Union Convention	SGF	Great Falls
11-13	MT Dept of Labor & Industry	OI	Kalispell
11-14	Montana Telephone Association	HI	Great Falls
12-14	MT Assn of Realtors	COL	Helena
13-16	Hasson Grotto Convention	SGF	Great Falls
15	Search & Rescue "Rendezvous"		Hamilton
17-21	Suzuki for Children	SGF	Great Falls
18-23	* Y's Men International Convention	HI	Great Falls
19	Avon	CKI	Butte
19-20	MT Good Sams		Bozeman
19-20	MT Petroleum Association	OI	Kalispell

## JULY MISCELLANEOUS

* 26th Annual Yellowstone River Boat Float		Big Timber
* Pioneer Museum		Glasgow
* PowerHouse Tours (Ft. Peck)		Glasgow
Plays in Park & A Sing Along		Livingston
1 Exhibit Opening - "Wolves & Humans"	MR	Bozeman
1 Chair Lift for hiking,photography Snowbowl		Missoula
1-2 Butte High Class 1959 Reunion	CKI	Butte
1-2 Class of 49 Reunion		Havre
1-31 Collection of W.A. Clark-Yell.Art Center		Billings
2 Intl Caravan Assoc Breakfast		Bozeman
2 Northern Virginia Unit- Wally Byam	HI	Bozeman
2-4 Swap Meet		Old IGA Lt Livingston
3-4 * Jaycee Street Dance/Fireworks Display		Sidney
4 * 4th of July Parade		Butte



4	*Parade--Steak Fry		Choteau
4	*4th Parade & Fireworks		Polson
4	Fort Owens 4th of July Celebration		Stevensville
7-8	Butte High Class of 1969 Reunion	WBI	Butte
7-8	Butte High Class 1964 Reunion	CKI	Butte
8	*Yellowstone Boat Float		Columbus
8	*Stein Haus '30 Softball Assoc. Dance	FSA	Great Falls
12-15	Leafy Spurge Symposium	HI	Bozeman
13-15	Crazy Days		Livingston
14-15	Butte Central Class of 1944 Reunion	WBI	Butte
14-15	Butte High Class 1979 Reunion	CKI	Butte
14-16	HHS Class of 39 50th Reunion		Havre
15-16	*Homesteaders Day in Huntley		Billings
16-17	*Summerfair-Rocky Mountain College		Billings
20-22	Crazy Days	HV	Great Falls
21	*Board of Trustees Retreat	CGF	Great Falls
28	*Stillwater County 4H/FFA Fair	FG	Columbus
28-30	*Glacier Rod Run		Kalispell
29	*Sidewalk Bazaar-Downtown Great Falls		Great Falls
29	AG/Western Heritage Day		Great Falls
30	*Buffalo/Beef Barbeque-Rollins		Polson

## JULY RODEOS & FAIRS

1-4	*Libby Logger Days		Libby
1-4	*Marcus Daly Celebration	MDM	Hamilton
1-4	*Northwest MT Annual Cutting Event		Polson
2-4	Round-up & Parade		Livingston
3-4	*Milk River Days (Hinsdale)		Glasgow
4	*American Legion Rodeo		Choteau
4	Terry Centennial Rodeo		Terry
7-8	*Butte Vigilante Rodeo	RG	Butte
7-9	*Kerr Country Rodeo		Polson
7-9	*Wolf Point Wild Horse Stampede		Wolf Point
20-23	*Four County Marias Fair		Shelby
24-29	*Central Montana Fair, Horse Show & Rodeo		Lewistown
26-30	Gallatin County Fair		Bozeman
27-30	*Last Chance Stampede & Fair	FG	Helena
29	*4-H Horse Show		Polson
29-8/5	*State Fair	FG	Great Falls
30-8/2	*Northeast Montana Fair		Glasgow

## JULY SPORTS

	*Seniors Golf Tournament	BSR	Big Sky
	*Stock Car Races (Ft. Peck)		Glasgow
	*Townsend Invitational Golf Tournament		Townsend
	*Old Timers Softball Tournament		Townsend
1-2	*2nd Annual MT Sailing Assoc. Flatus Race		Polson
3	*Demolition Derby		Choteau
4	*Flag Golf Tournament		Deer Lodge
7-8	*Farm & Ranch Golf Tournament		Shelby
7-9	Yellowstone River Boat Float		Livingston
8-9	Hot Laps Mountain Bike Jam	Snowbowl	Missoula
9	Men's Open Golf	OGC	Big Timber
11	*Ladies Invitation Golf		Deer Lodge
14-15	*Montana Governor's Cup Walleye Tour.		Glasgow
14-16	*Big Sky State Games		Billings
14-16	Sapa/Johnsrud Baseball Tournament		Whitefish
19	Women's Open Golf	OGC	Big Timber
19	Ladies Invitational Golf Tournament		Red Lodge

21-23	*Whitefish Lake Regatta		Whitefish
27-30	*Sweet Grass Cutting Horse Event		Big Timber
28-8/2	Northwest Regional Bambino Baseball		Glasgow
30	2-Person Best Ball: 80% Golf	OGC	Big Timber

## JULY THEATRE & PERFORMING ARTS

14-15	*Road Agent Square Dance		Virginia City
19-31	*Festival of Music		Kalispell

## AUGUST CENTENNIAL EVENTS

1-31	Cole Ranch Rodeo		Kalispell
2	Women's Centennial Invitations Golf Trnm		Plentywood
2-6	Pioneer & Classic Auto Club Tour		WYellowstne
3-6	SGHS Centennial Year Reunion		Big Timber
5	Western Historic Harmony (MT History) BM		Whitefish
6	Montana Centennial Derby		Great Falls
13	Fort Union Grand Opening-Dedication		Sidney
14-16	Sheridan County State Centennial Fair		Plentywood
17-10	Same Time Next Year	BM	Whitefish
17-20	Tri County Fair		Deer Lodge
23-27	Western Montana Centennial Fair		Missoula
23-27	Western Montana Centennial Fair & Rodeo		Missoula
24-27	*East MT Centennial Year Fair		Miss City
26-27	Heritage Yellowstone Folklife Festival		Billings

## AUGUST CONVENTIONS & LOCAL MEETINGS

1	*MT State Reading Council	FHS	Anaconda
1-5	*Montana Coaches Clinic	HI	Great Falls
2-5	State Elks Convention		Lewistown
6-10	MT Education Assn	COL	Helena
9-11	N.W. Agate	OI	Kalispell
9-15	American Contract Bridge League	HI	Great Falls
11-13	Montana Jaycee Convention	GN Motel	Malta
13-15	Ryans Buyers Fair	HI	Billings
13-18	Writers Academy	OI	Kalispell
14-16	N.W. Poker Assoc.	OI	Kalispell
16-20	*Kiwanis State Convention	FHS	Anaconda
17-19	Western Rendezvous of Art	COL	Helena
17-19	Smith Cookie Company	OI	Kalispell
18-19	Lutheran Brotherhood		Lewistown
19	USS. Admiral - W. S. Benson Association	WBI	Butte
23-27	U.S.S. Helena Assn. Reunion	COL	Helena
25-27	*Rocky Mountain Puf Club	FHS	Anaconda
28-29	MT. Society of CPA's	CKI	Butte

## AUGUST FESTIVALS & SHOWS

	*Country Fair	BSR	Big Sky
1-5	History Fair-Cascade Historical Society	PGS	Great Falls
2	Taste of Bozeman		Bozeman
4-6	Billings Gun Show	HI	Billings
4-6	Sweet Pea Festival		Bozeman
4-6	*Pride of MT Sheep & Wool Festival		Bozeman
4-6	Stevensville Creamery Picnic		Stevensville



5	* Ethnic Festival	CC	Butte
5-6	22nd Annual Osprey Sport Parachute Club		Kalispell
5-6	District 4 Annual Fiddler's Picnic	Allison's	Livingston
9-13	* Butte-Silver Bow County Fair	CC	Butte
11-13	* Annual Art Festival		Virginia City
12	* Mission Mountain Music Fest		Polson
12-19	* Montana Fair	Metra	Billings
24-27	Fall Gun Show	OI	Kalispell
24-27	Kalispell Gun Show		Kalispell
25-27	* Barnes Steam Show & Threshing Bee		Belgrade
25-27	Huff's Antiques Show and Sale	Metra	Billings
26	Chamber of Commerce Variety Show		Wibaux
26-27	Country Fun Weekend		Hardin

**AUGUST  
MISCELLANEOUS**

	* Pioneer Museum		Glasgow
	* PowerHouse Tours (Ft. Peck)		Glasgow
	Fish Derby for Kids & Chili Cook-Off		Livingston
	Plays in Park & Sing Along		Livingston
4-6	Butte High Class of 1939 Reunion	WBI	Butte
4-6	* New Wodopana Celebration		Wolf Point
5	Class of 1969 Reunion	OI	Kalispell
5	* Outdoor Art Festival		Polson
5-6	Forest Grove Celebration		Forest Grove
5-6	Snowbowl Summer Festival	Snowbowl	Missoula
7-11	National O-Mok-See	FG	Helena
11-12	1959 Class Reunion	VRL	Missoula
11-13	* Girl Scout Jamboree		Choteau
12	Sunset Cruise on the Far West Rob Quist		Kalispell
12-13	Butte High Class of 1934 Reunion	WBI	Butte
13	Annual Catholic Mass on St. Mary's Peak		Stevensville
15-16	National Catholic Society	HI	Bozeman
15-18	MT Credit Union	HI	Bozeman
17-22	Billings Market	HI	Billings
19	* Big Sky Arts & Crafts		Lewistown
19	Big Sky Endurance Rides-Horse 30-50 Mile		Lewistown
20	Big Sky Endurance Rides-Horse 25-40 Mile		Lewistown
20	Crafts in Action	PCM	Livingston
26	* World Championship Pack Horse Race		Big Timber
27	Crafts in Action	PCM	Livingston
27	Demolition Derby		Wibaux

**AUGUST  
RODEOS & FAIRS**

2-5	Park County Fair		Livingston
3-5	* Richland County Fair		Sidney
5-6	* Pioneer Days		Polson
9-11	* 53rd Annual Sweet Grass County Fair		Big Timber
10-13	* Dawson County Fair		Glendive
12	* St. Vincent Hospital Chili Cook-off		Billings
12-13	Horse Racing		Kalispell
12-13	* Lake County Jr. Fair		Polson
16-20	Northwest Montana Fair		Kalispell
17-19	* Rosswell County Fair		Culbertson
18-20	Horse Racing		Kalispell
22-24	* McCone County Fair		Circle
25-27	Wibaux County Fair		Wibaux
26	Rodeo		Wibaux
29-8/5	* State Fair	FG	Great Falls

**AUGUST  
SPORTS**

	* Stock Car Races (Ft. Peck)		Glasgow
	* Coppercup Regatta		Polson
	* Connors Memorial Field Softball Tourney		Townsend
	* Hoppy Day Golf		Deer Lodge
1	Pepsi Free Road Race	GP	Great Falls
5-6	* Guys & Dolls Golf Tournament		Deer Lodge
7	Seniors Golf Tournament	OGC	Big Timber
7-10	MT State Senior Golf Tournament		Bozeman
12	* East-West Shrine Game	MST.	Great Falls
13	Tyler Trophy Golf Tournament		Deer Lodge
18-20	Mountain Rendezvous Golf Tournament		Red Lodge
19-20	Sizzler Golf Tournament		Shelby
26	Health Run 1 Mile, 5K & 10 K Runs		Wibaux

**AUGUST  
THEATRE & PERFORMING ARTS**

	* Big Sky Music Festival	BSR	Big Sky
	* Shakespearie in the Park	BSR	Big Sky
12	* "Art in the Park" (Ft. Peck)		Glasgow
17-19	* Montana Cowboy Poetry Gathering		Big Timber



# AUTUMN '89

**SEPTEMBER  
CENTENNIAL EVENTS**

	Photo Contest	VAC	Chester
1-31	Cole Ranch Rodeo		Kalispell
2-9	Montana Cattle Drive		Billings
3	Jazz Concert	BM	Whitefish
4	Park County Centennial Cattle Drive		Livingston
5-10	41st Infantry Division Reunion		Kalispell

7-9	Old West Fair		Billings
8-10	Old Settler's Days		Clyde Park
8-9	Bazaar MT Made Products-West Park Plaza		Billings
16-17	* 7th Annual Old Timers' Rodeo		Great Falls
16-17	Missoula Heritage Festival		Missoula
21-24	* Herbstfest at Laurel		Billings
22-24	Havre Festival Days		Havre



SEPTEMBER

CONVENTIONS & LOCAL MEETINGS

1-2	AAA World War 2 Reunion	Lewistown
1-3	*Montana State Handgunners Association	Lewistown
2-3	*Jehovah's Witness Convention	CC Helena
5-10	41st Infantry Division	OI Kalispell
5-7	Associated Foods	HI Billings
7	Assistants for Business Clinic	CKI Butte
7-11	*Montana Society of Association Exec's	HI Great Falls
9-10	Montana Trappers	Lewistown
10-12	*MT Retired Teachers Association	FHS Anaconda
11-13	I.F.C.A. Conference	Hamilton
11-14	MT Tavern Association	HI Bozeman
12-15	MT Motor Carrier's Convention	HI Billings
12-16	MT League of Cities & Towns	COL Helena
13-16	Resource Training Center	VRL Missoula
14	Montana League of Cities & Towns	CC Helena
15-16	Montana Cattlewomen Association	Lewistown
15-16	Old Time Fiddlers Association	Lewistown
15-17	Montana Women's Bowling Assoc.	OI Kalispell
16	*American Lung Association	FHS Anaconda
16-17	Food Distributors	Lewistown
16-18	Yellowstone Beauty Supply	HI Billings
20-22	MT League of Savings Institutions	COL Helena
20-23	*Assoc. of Tobacco & Candy Dist. Conv.	HI Great Falls
21-22	Ducks Unlimited	OI Kalispell
21-24	*MT Society of CPA's	FHS Anaconda
22-23	*Assembly of God Womens Retreat	Lewistown
22-24	MT Food Distributors Assn.	HI Billings
22-24	Retired 93rd Carrier Battalion	VRL Missoula
26-30	Holistic Resource Management	HI Bozeman
27-29	MT Fire Chiefs	HI Billings
29-10/1	*Northwest Chapter of Pro Picture Framers	FHS Anaconda
29-10/1	District Sorooptimist Meeting	Havre

SEPTEMBER

FESTIVALS & SHOWS

	*Belgrade Chamber Fall Festival	Belgrade
	*Nordicfest	Libby
1-10/12	Diana Haker's Wildlife Exhibit	AC Butte
1-3	*2nd Annual MT Dixieland Jazz Festival	Great Falls
4	*Old Trail Museum Flea Market	Choteau
8-10	Silver Collector Car Auction	HI Billings
9-10	Emigrant Fair	HI Helena
15-17	*Helena Antique Show	CC Helena
15-17	4 X 4 Vehicle Show	Kalispell
29-10/1	*Electrum	CC Helena
29-10/1	Antique & Coin Show	Kalispell
29-30	Oktoberfest	CC Great Falls
30	*Lions Club Swimming Pool Festival	Choteau

SEPTEMBER

MISCELLANEOUS

	*Pioneer Museum	Glasgow
	*PowerHouse Tours (Ft. Peck)	Glasgow
2	*Saco Annual Fun Day	Saco
3-4	*Saddle Club Wagon Train-Antique Show	Culbertson
4	*Cascade Co. Trades & Labor Picnic	FG Great Falls
4	Park County Museum Closes for 89 Season	PCM Livingston

7	*A Taste of Whitefish	Whitefish
9	**"Go For The Gold"	Glasgow
14	Ducks Unlimited Banquet	HI Great Falls
16	*Health Fair	Glasgow
17	Annual Return Salish to BitterrootSt. Mary's	Stevensville
21	Historical Program	PGS Great Falls
21	Electric City Kennel Dog Show	FG Great Falls
23-24	*Northeast Montana Threshing Bee	Culbertson
30	*St.Vincent Hospital S.A.I.N.T.S Benefit	Billings
30	*Saints Cattle Baron's Ball Benefit	Billings
30-10/1	Pioneer Power Days Threshing Bee	Lewistown
30-10/1	Art on the Highline Show	Shelby

SEPTEMBER

RODEOS & FAIRS

	Rancher Rodeo/Cattle Drive	Miles City
	*Saco "Fun Days"	Glasgow
2	Sanders County Fair	Plains
2-4	*Sleeping Buffalo Days	Glasgow
16-17	*Legends of Rodeo	FG Great Falls

SEPTEMBER

SPORTS

	*Stock Car Races (Ft. Peck)	Glasgow
1-4	International Mustang Meet	HI Billings
2	*Fall Horseback Poker Run	Virginia City
2	*HiLine Sportsmen Fish Derby-Lake Elwell	Chester
2-4	51st Interstate Bank Labor Day Golf Trnm	Kalispell
8-10	*Whitefish Summer Games	Whitefish
15-17	State Horse Show	FG Hamilton
16	MSU vs Eastern Washington Football	Bozeman
18	*Big Bern Golf Tournament	BSR Big Sky
21-24	Montana Womens Bowling State Jamboree	Kalispell
23	MSU vs N. Mexico Highlands Football	Bozeman

OCTOBER

CONVENTIONS & LOCAL MEETINGS

1-4	Montana Hospital Association	Great Falls
2-4	Western Petroleum Marketers	HI Bozeman
3	*Extension Homemakers District Conference	FHS Anaconda
4-6	Department of Social Rehabilitation	OI Kalispell
4-6	Montana Medical Association	VRL Missoula
5-6	MT China Painters	Lewistown
5-7	*MT. Conf. on Developmental Disabilities	HI Great Falls
5-8	Montana Florists	HI Billings
6-7	American Field Service	Lewistown
6-8	Gideons	COL Helena
8	MT Board of Barbers & Cosmetologists SGF	Great Falls
11-13	Peaks & Prairies Golf Course Supts.	HI Billings
12	*Skyline Sportsmen Association	WBI Butte
12-13	Chemical Dependency Program	HI Great Falls
13-14	*Montana State Round-Up	HI Great Falls
13-14	Presbyterians	Lewistown
15-19	*Department of Revenue	Lewistown
18-19	MT State Reading Council	HI Bozeman
18-20	MT Vocational Assn.	HI Billings
18-20	R.I.P.D.	SGF Great Falls
18-21	MT Federation of Teachers	COL Helena
18-21	Montana School Board Association	VRL Missoula



19-21	* Montana Farmers Union	HI	Great Falls	3-4	Centennial Play	Medicine Lake
25-27	MT Credit Union Network	HI	Billings	4	Centennial Costume Ball	Billings
26	* President's Council Board Meeting	CGF	Great Falls	8	Centennial Ball	Glendive
27-28	Full Gospel Business Men		Lewistown	8	Time Capsule: To the Future	Missoula
27-29	Lions Club	HI	Billings	8	Sheridan Cnty Centennial Birthday Party	Plentywood
27-30	MT State Cosmetology Assn	COL	Helena	8	Centennial Ball	Sidney
31-11/5	MT Auto Dealers Assn	COL	Helena	8-10	Capital City 89's State Celebration	CC Helena
				18	Missoula Symphony Centennial Concert	Missoula

OCTOBER

FESTIVALS & SHOWS

2	Harvest Festival		Miles City
6	Homemaker Show		Kalispell
6	Fiesta Days & Octoberfest		Whitefish
6-7	* Great Seed Show Harvest Festival		Glasgow
6-8	Big Sky Faceters Gem Show	SGF	Great Falls
7	* Great Falls Ski Club Ski Swap	FG	Great Falls
7	7th Annual Fun & Winefest		Kalispell
15-11/27	Paintings by Ray Campeau	AC	Butte
20	Nile Style Show	CC	Helena
20-22	Conrad Mansion Christmas Bazaar		Kalispell
21-22	* Octoberfest	CCH	Anaconda
27-29	Ski Swap	HI	Billings
28	* J & L Craft Show	CC	Helena

OCTOBER

MISCELLANEOUS

1	Fall Automobile Cruise		Kalispell
6-7	Sigma Nu	VRL	Missoula
9	Silver Bow Tavern Association Calcatta	CKI	Butte
13	Columbus Hospital Awards Banquet	SGF	Great Falls
14	* Military Ball	CC	Helena
14	Fund Raiser for N.W. MT. Loggers	OI	Kalispell
14	Depot Center Closes for 89 Season	DC	Livingston
15	St. Jude's Harvest Dinner		Havre
16	* "Pride Day"	CGF	Great Falls
20-22	Bridge Club Tournament	HI	Bozeman
21	United Methodist Women's Bazaar/Dinner		Havre
21	* KMTX Sock Hop	CC	Helena
27	MT Society of CPA's	HI	Bozeman
31	* Art Center Make-up Day	CC	Helena
31	* First Lutheran Church Smorgasboard		Wolf Point

OCTOBER

RODEOS & FAIRS

14-21	* Nothern Int. Livestock Exposition		
	NILE	Metra	Billings

OCTOBER

SPORTS

6	Idaho Sate vs Lady Griz Volleyball	FH	Missoula
8	E. Washington State vs Grizzley Football	UM	Missoula
14	MSU vs U of Idaho Football		Bozeman
15	MSU vs Lady Griz Volleyball	FH	Missoula
15	Northern Arizona vs Grizzley Football	UM	Missoula
28	MSU vs Weber State Football		Bozeman

NOVEMBER

CENTENNIAL EVENTS

Centennial Cattle Sale	Stanford
------------------------	----------

NOVEMBER

CONVENTIONS & LOCAL MEETINGS

3-6	* Montana Innkeepers Association	FHS	Anaconda
4-5	National Board of Cosmology	VRL	Missoula
8-11	Rocky Mtn Assoc of Fairs	HI	Bozeman
8-11	MT Association of Convention Districts	SGF	Great Falls
9-11	Intrmnt Assoc of College & Univrsty Halls	CKI	Butte
10-11	Jaycees State Convention		Lewistown
11-13	Montana Jaycee Convention	Mercantile	Lewistown
12-14	Montana Farm Bureau	HI	Bozeman
15-18	MT Seed Growers Association	HI	Bozeman
16-17	Eastern MT College Tax Practitioners	HI	Billings

NOVEMBER

FESTIVALS & SHOWS

	* Festival of Arts Craft Show		Bozeman
	* Hillcrest Hawthorne Bazaar	CC	Butte
	Winter Home & Recreation Show		Kalispell
3-5	* St. James Hospital Bazaar	WBI	Butte
4	* Christmas Craft Show	CC	Helena
4	KBOW Holiday Preview	CKI	Butte
5	Huff's Antiques Show and Sale	Metra	Billings
10-12	Soroptomist Holiday Extravaganza	OI	Kalispell
16	* AAUW Christmas Bazaar and Art Show		Glasgow
17	* Holiday Food Show	HI	Billings
17-19	Christmas Parade		Kalispell
24	* Rainbow Holiday Bazaar	HI	Billings
24-25	* Craft & Art Show	CC	Helena
24-26	Artists & Craftsman of the Flathead		Kalispell
26	* Billings Education Assn. Christmas Fair	HI	Billings

NOVEMBER

MISCELLANEOUS

	* Butte Silver Bow Chamber Annual Dinner		Butte
2-4	MT Defense Travelers	HI	Bozeman
3	* Presbyterian Bazaar		Wolf Point
8-10	Capitol City 89's State Celebration	CC	Helena
9-14	Billings Market	HI	Billings
11	* Community Hospital Annual Bazaar	HS	Anaconda
11	* Sno-Ball	CC	Helena
17-19	* International Whist Tournament		Glasgow
18	Auction	CC	Helena
24	* Santa Arrives and Christmas Promotion		Glasgow
25-26	Big Brothers & Sisters Bazaar	NGA	Anaconda

NOVEMBER

SPORTS

4	MSU vs U of M Football		Bozeman
25	MSU vs St. Martins B-ball	FH	Bozeman

\* \* \* \* \*

# WINTER '89

DECEMBER  
CONVENTIONS & LOCAL MEETINGS

1-2 MT Logging Assoc. Quarterly Meeting OI Kalispell

DECEMBER  
FESTIVALS & SHOWS

	Christmas Stroll	Bozeman
	* MT Tech Christmas Bazaar & Trade Show	Butte
1-3	* Festival of Trees	CC Helena
2	* Garden Club Christmas Show	HS Anaconda
2	* Soroptimist Winter Fair	Choteau
2	* Soroptimist's Style Show	Glasgow
2	* Christmas at the Cottonwood Bazaar	Glasgow
3	* Christmas Stroll	Whitefish
3-31	* Local Artists Show	CCM Anaconda
6-9	* Christmas at the Daly Mansion	Hamilton

DECEMBER  
MISCELLANEOUS

	* Christmas Home Tour	Butte
1	* Festival of Lights	Shelby
2	St. Jude's Bazaar	Havre
2	Policeman's Ball	OI Kalispell
3	* Good Neighbor Day	Anaconda
3	* Elks Memorial Service	Glasgow
7	Appreciation Day Chamber of Commerce	Wibaux
31	* Firemans Ball	CC Helena

DECEMBER  
SPORTS

1-3	Girl's State C B-ball Tournament	CC Butte
6	MSU vs S. E. Louisiana B-ball	FH Bozeman
9	MSU vs McNeese State B-ball	FH Bozeman
20	MSU vs TCU B-ball	FH Bozeman
22	MSU vs S.F. Austin B-ball	FH Bozeman
28	MSU vs Western State B-Ball	FH Bozeman
30	MSU vs E. Illinois B-ball	FH Bozeman

# CHAMBERS

For additional information on events, please contact the Chamber of Commerce in the town where the event is taking place.

ANACONDA (Deer Lodge Co.) 306 E. Park, Zip 59711, Phone 563-2400.

BAKER (Fallon Co.) P.O. Box 849, Zip 59313.

BELGRADE (Gallatin Co.) P.O. Box 1126, Zip 59714; Phone 388-1616.

BIGFORK (Flathead Co.) P.O. Box 237, Zip 59911; Phone 837-5888.

BIG SANDY (Chouteau Co.) P.O. Box 511, Zip 59520; Phone 378-2247.

BIG TIMBER (Sweetgrass Co.) P.O. Box 1012, Zip 59011; Phone 932-5131.

BILLINGS (Yellowstone Co.) P.O. Box 2519, Zip 59103; Phone 245-4111.

BITTERROOT VALLEY (Ravalli Co.) Hamilton, Corvallis, Darby, Stevensville, Victor, 105 E. Main, Hamilton, Zip 59840; Phone 363-2400.

BOZEMAN (Gallatin Co.) P.O. Box B, Zip 59715; Phone 586-5421.

BRIDGER (Carbon Co.) P.O. Box 99, Zip 59014; Phone 662-3334.

BROADUS (Powder River Co.) Powder River Commercial Club, P.O. Box 484, Zip 59317; Phone 436-2811.

BUTTE-SILVER BOW (Silver Bow Co.) 2950 Harrison Ave., Zip 59701; Phone 494-5595.

CHESTER (Liberty Co.) P.O. Box 632, Zip 59522.

CHINOOK (Teton Co.) P.O. Box 744, Zip 59523

CHOTEAU (Blaine Co.) Rte. 2, Box 256, Zip 59422; Phone 466-5897.

CIRCLE (McCone Co.) Zip 59215; Phone 485-2414.

COLUMBIA FALLS (Flathead Co.) P.O. Box 312, Zip 59912; Phone 892-2072.

COLUMBUS (Stillwater Co.) P.O. Box 783, Zip 59019; Phone 322-5361.

CONRAD (Pondera Co.) 406 1/2 South Main, Zip 59425; Phone 278-7791.

CULBERTSON (Roosevelt Co.) P.O. Box 633, Zip 59218; Phone 787-5821.

CUT BANK (Glacier Co.) P.O. Box 1243, Zip 59427; Phone 873-4041.

DEER LODGE (Powell Co.) 1171 South Main, Zip 59722;  
Phone 846-2094.

DILLON (Beaverhead Co.) Beaverhead Chamber, P.O.  
Box 830, Zip 59725; Phone 683-5511.

EKALAKA (Carter Co.) P.O. Box 297, Zip 59324;  
Phone 775-6658.

ENNIS (Madison Co.) P.O. Box 291, Zip 59729.

EUREKA (Lincoln Co.) Tobacco Valley Board of  
Commerce, P.O. Box 186, Zip 59917; Phone 296-2223.

FAIRFIELD (Teton Co.) P.O. Box 39, Zip 59436;  
Phone 467-2531.

FAIRVIEW (Richland Co.) P.O. Box 374, Zip 59221;  
Phone 747-3226.

FORSYTH (Rosebud Co.) P.O. Box 448, Zip 59327;  
Phone 356-2233.

FORT BENTON (Chouteau Co.) Community Improvement  
Assoc., Zip 59442; Phone 622-3761.

GARDINER (Park Co.) P.O. Box 81, Zip 59030;  
Phone 848-7681.

GLASGOW (Valley Co.) P.O. Box 832, Zip 59230;  
Phone 228-2222.

GLENDIVE (Dawson Co.) P.O. Box 930, Zip 59330;  
Phone 365-5601.

GREAT FALLS (Cascade Co.) P.O. Box 2127, Zip 59403;  
Phone 761-4434.

HARDIN (Big Horn Co.) 204 N. Center Ave., Zip 59034;  
Phone 665-1672.

HARLOWTON (Wheatland Co.) P.O. Box 694, Zip 59036;  
Phone 632-5832.

HAVRE (Hill Co.) P.O. Box 308, Zip 59501;  
Phone 265-4383.

HELENA (Lewis & Clark Co.) 201 E. Lyndale, Zip 59601;  
Phone 442-4120, 1-800-5-HELENA in Montana.

HOT SPRINGS (Sanders Co.) P.O. Box 580, Zip 59845;  
Phone 741-2652.

JORDAN (Garfield Co.) Zip 59337; Phone 557-2480.

KALISPELL (Flathead Co.) 15 Depot Loop, Zip 59901.  
Phone 752-6166

LAKESIDE (Flathead Co.) Westshore Chamber, P.O. Box  
181, Zip 59922; Phone 844-3809.

LAUREL (Yellowstone Co.) P.O. Box 395, Zip 59044;  
Phone 628-8105.

LEWISTOWN (Fergus Co.) P.O. Box 818, Zip 59457;  
Phone 538-5436.

LIBBY (Lincoln Co.) P.O. Box 704, Zip 59923;  
Phone 293-3832.

LINCOLN (Lewis & Clark Co.) P.O. Box 985, Zip 59639;  
Phone 362-4949.

LIVINGSTON (Park Co.) 1104 W. Park, Zip 59047;  
Phone 222-0850.

MALTA (Phillips Co.) Drawer GG, Zip 59538;  
Phone 654-1776.

MANHATTAN (Gallatin Co.) P.O. Box 606, Zip 59741.

MILES CITY (Custer Co.) 901 Main St., Zip 59301;  
Phone 232-2890.

MISSOULA (Missoula Co.) P.O. Box 7577, Zip 59807;  
Phone 543-6623.

PHILIPSBURG (Granite Co.) Box 661, Zip 59858;  
Phone 859-3256.

PLAINS (Sanders Co.) P.O. Box 714, Zip 59859;  
Phone 826-3605.

PLENTYWOOD (Sheridan Co.) P.O. Box 4, Zip 59254;  
Phone 765-2340.

POLSON (Lake Co.) P.O. Box 677, Zip 59860;  
Phone 883-5969.

POPLAR (Roosevelt Co.) P.O. Box 313, Zip 59255;  
Phone 768-3323.

RED LODGE (Carbon Co.) P.O. Box 988, Zip 59068;  
Phone 446-1718.

RICHEY (Dawson Co.) P.O. Box 279, Zip 59259;  
Phone 773-5536.

RONAN (Lake Co.) P.O. Box 254, Zip 59864;  
Phone 676-2751.

ROUNDUP (Missoula Co.) P.O. Box 751, Zip 59072;  
Phone 323-1966.

SACO (Phillips Co.) Zip 59261; Phone 527-3361.

SCOBAY (Daniels Co.) P.O. Box 91, Zip 59263;  
Phone 487-2821.

SEELEY (Missoula Co.) P.O. Box 516, Seeley Lake, Zip  
59868.  
Phone 677-2880

SHELBY (Toole Co.) P.O. Box 488, Zip 59474;  
Phone 434-7184.

SIDNEY (Richland Co.) 909 S. Central Ave., Zip 59270;  
Phone 482-1916.

ST. IGNATIUS (Lake Co.) P.O. Box 216, Zip 59865;  
Phone 745-3339.

STANFORD (Judith Basin Co.) Commercial Club, F.O. Box  
386, Zip 59479; Phone 566-2596.

SUPERIOR (Mineral Co.) P.O. Box 483, Zip 59872.

SWAN LAKE (Lake Co.) Hwy 83, Zip 59911;  
Phone 886-2354.

THOMPSON FALLS (Sanders Co.) P.O. Box 493, Zip  
59873;  
Phone 827-4850.

THREE FORKS (Gallatin Co.) P.O. Box 1103, Zip 59752;  
Phone 285-3414.

TOWNSEND (Broadwater Co.) P.O. Box 947, Zip 59644;  
Phone 266-3176.

TROY (Lincoln Co.) P.O. Box 604, Zip 59935;  
Phone 295-4115.

VIRGINIA CITY (Madison Co.) P.O. Box 145, Zip 59755;  
Phone 843-5341.

WEST YELLOWSTONE (Gallatin Co.) P.O. Box 458, Zip  
59758;  
Phone 646-7701.

WHITEFISH (Flathead Co.) P.O. Box 1120, Zip 59937;  
Phone 862-3501.

WHITEHALL (Jefferson Co.) P.O. Box 667, Zip 59759;  
Phone 287-3343.

WHITE SULPHUR SPRINGS (Meagher Co.) P.O. Box 356,  
Zip 59645; Phone 547-3831.

WIBAUX (Wibaux Co.) P.O. Box 260, Zip 59353.

WOLF POINT (Roosevelt Co.) P.O. Box 237, Zip 59201;  
Phone 653-2012.

MONTANA CHAMBER OF COMMERCE (State) P.O. Box  
1730, Helena, Zip 59624; Phone 442-2405.



**MONTANA CHAMBER  
OF COMMERCE**

## A Treasure Box

Distinctive wooden treasure boxes made in Montana are available for the medals and can also serve as gift boxes. The large presentation case holds the set of five one-ounce silver medals and includes an inlaid ceramic tile depicting the pioneer family, while the small presentation case holds one silver medal, or one gold medal. Both cases allow viewing of both the front and back of the medals.



# The Official Montana Centennial 1889-1989 Medals



Medals shown  
actual size.



Centennial '89, Inc.  
Commemorative Medals  
P.O. Box 8900  
Helena, Montana 59604

# ORDER FORM

## Montana Statehood Centennial Commemorative Medals

Qty.	1 Ounce .999 Silver	Subtotal
	Pioneer Family/Grizzly	\$30.00
	Mountain Man/Elk	\$30.00
	Train/Mountain Goat	\$30.00
	Native American/ Buffalo	\$30.00
	Cowboy/Moose	\$30.00
	Postage/Handling/Insurance \$5.00 for first medal plus \$3.00 for each additional	
<b>Total For Silver Medals</b>		
	Small Presentation Case	
	Case (holds 1 medal)	\$15.00
<b>Total for Small Presentation Case</b>		
	<b>Set of 5 Medals in Large Case with Inlaid Tile</b>	\$190.00
	Postage/Insurance/Handling	\$10.00 (per set)
<b>Total for Sets of 5 Medals</b>		
	1 Ounce .999 Gold	
	Gold Panner/State Seal (includes small presentation case)	\$850.00
	Postage/Handling/Insurance	\$15.00 per
<b>Total for 1 Ounce Gold Medal</b>		
	¼ Ounce .999 Gold	
	Gold Panner/State Seal (includes small presentation case)	\$195.00
	Postage/Handling/Insurance	\$10.00 per
<b>Total for ¼ Ounce Gold Medal</b>		
<b>Grand Total</b>		

\*Prices subject to increase due to market fluctuation in spot price of silver and gold. Each medal will be produced in a limited quantity.

Each medal comes in a clear plastic Air-tite® container. To order by mail, send this order form along with your personal check, cashier's check, money order or credit card information to Centennial '89, Inc.

NAME: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

TOTAL AMOUNT ENCLOSED: \_\_\_\_\_

PLEASE CHARGE TO MY: \_\_\_\_\_ VISA \_\_\_\_\_ MASTER CHARGE \_\_\_\_\_

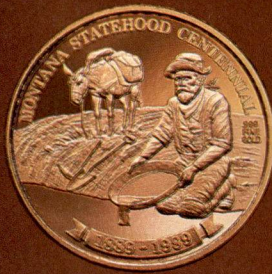
ACCOUNT # \_\_\_\_\_ EXP. DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

Mail To: Centennial '89, Inc.  
Commemorative Medals  
P.O. Box 8900  
Helena, Montana 59604



Please allow 3-4 weeks for delivery on mail orders • All sales are final and not subject to refund.



Medal shown  
actual size.

## The Gold Panner

The gleam of gold is the theme of the sixth medal. It is the only gold medal in the series and is available in two sizes - one troy ounce and one-quarter troy ounce. These .999 fine gold coins also come in their own individual display cases. The gold panner played an important part in Montana's history. Gold was first discovered in 1852 at Gold Creek and within 10 years the gold rush was on and Montana's economy busted. On the reverse of these gold medals is the Great Seal of the State of Montana. Bearing the motto "Oro-Y-Plata", the Spanish words for gold and silver, the seal embodies all the essential elements of Montana's economy and future. The central part of the seal includes a plow and miner's pick and shovel, with the Great Falls of the Missouri River on the right and mountain scenery on the left. The idea for the state seal was conceived in 1865 and a design was engraved by an out-of-state artist. After Montana became a state, Montana artist G.R. Metten dramatically changed the original design to its present state.

- Only the first 1,989 silver sets will be numbered.
- Individual silver medals will not be numbered.
- The one-ounce gold medal will be limited to only 1,989 and each medal will be numbered.
- The one-quarter ounce gold medal will be limited to the number minted on or before December 31, 1989.

# CELEBRATE MONTANA'S CENTENNIAL

## The Commemorative Silver Medals

These one troy ounce limited, .999 fine silver medals were designed by Montana artist Frank Hagel. Each medal depicts a historical theme and an animal representing Montana's rich and diverse heritage. These outstanding medals offer a tribute to Montana's past and an heirloom to hand down to future generations. The silver medals will be limited to the number minted on or before December 31, 1989.

Don't miss out on this once-in-100 years opportunity to collect these limited centennial medals. Purchase from your local Montana Banker's Association participating banks or Centennial '89, Inc. Purchase these beautiful medals individually or as sets.

### The Pioneer Family

Pioneer Families came by the thousands to homestead in Montana during the late 1800s and early 1900s. They were a people of great strength, determination and courage who represented an enthusiastic hope for the future. Depicted on the reverse of this medal is the grizzly bear, whose life began to change with the arrival of the white man. From the time the Lewis and Clark

expedition traversed Montana the grizzly's kingdom began to crumble.



### Native Americans

Native Americans represent a spirit of dignity and a sense of true strength and endurance. As our state's earliest residents, they provided an important social and cultural contribution to our history. Montana is the home to seven North American Indian tribes. The buffalo, which were so numerous in the mid-1880s that westbound travelers reported herds they could not see across, is on the

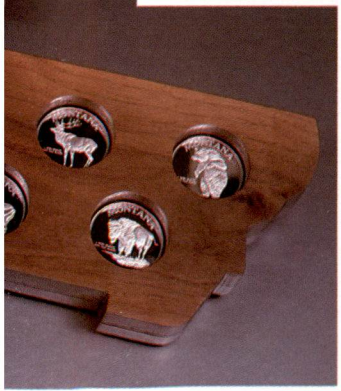
reverse of this medal. Hunters said they lost sleep when unseen herds made the ground rumble and shake. Now the species is protected in western Montana at the National Bison Range.



## The Cowboy

The cowboy has always been one of Montana's favorite heroes. He captured the imagination of America as a symbol of free and self-sufficient manhood. The cowboy will forever be a reminder of adventure and romance in our past. On the reverse of this medal is the moose, which inhabits the mountain ranges of western and central Montana. Lewis and Clark provided the first

written accounts of Montana's moose, which they encountered near the mouth of the Milk River. Once common throughout the state, the animals are now found mainly in mountainous terrain.



## The Railroad

The coming of the railroads, along with the growth of the cattle and mining industries, created prosperous times in the late 1800s and laid the groundwork for Montana statehood in 1889. Railroads accelerated the area's growth and its economic development. The mountain goat, found on the reverse side of this medal, served as the logo for Great Northern Railroad.

The goat is at home in Montana's rugged terrain. They inhabit the major mountain ranges in the western part of the state.



## The Trapper

The mountain men who helped map out the West played an important part in Montana's growth. These individuals were rugged, independent adventurers who explored and trapped in the wilderness. The elk, one of Montana's most prized big animals, is on the reverse of this medal. Today, Montana is one of the foremost elk hunting states in the nation.



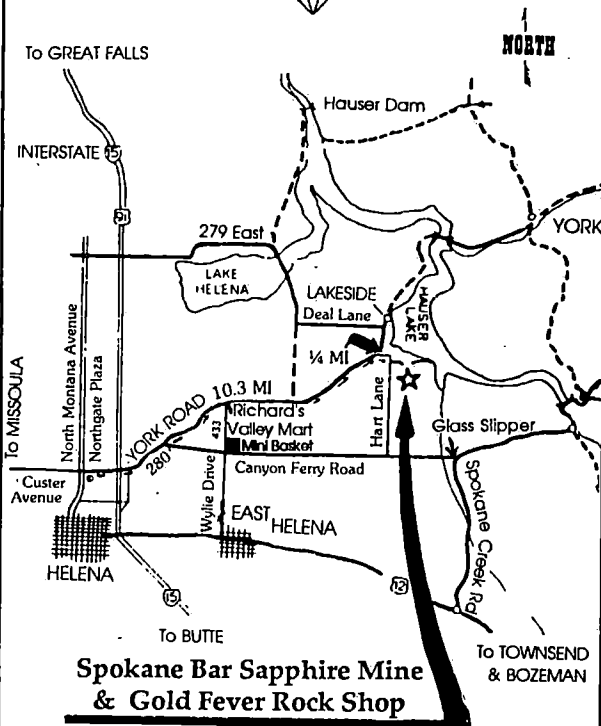
## About the Artist

Frank Hagel is a lifetime Montana artist now living in Kalispell in Montana's Flathead Valley. Hagel is a graduate of the Art Center College of Design in Los Angeles and worked as an illustrator for 12 years. Major commissions include the designs for the National Parks Centennial Medals and numerous mural-size historical paintings for major Montana businesses. Hagel's works can be found in private art collections throughout the United States.

Hagel was chosen to design Montana's Statehood Centennial medals because of his strong design background and knowledge of the chosen themes and animals. Many consider these centennial medal designs to be some of Hagel's finest works.

## Spokane Bar Sapphire Mine & Gold Fever Rock Shop

Russ & Deb Thompson  
4397 Hart Drive  
Helena, MT 59601, U.S.A.  
406 227-8989



**Spokane Bar Sapphire Mine and Gold Fever Rock Shop** located on the Missouri River at Hauser Lake. The "diggings" had been claimed by Samuel T. Hauser, Montana's first territorial governor. The mine is famous for the rich sapphire area called the "miners pit" once known as Castles Sapphire mine. Sapphires as large as 155 carats have been recovered with values in the thousands.

The site is "eye level" at "Eagles Heights". Eagles can be seen from the diggings. We offer sapphire and gold mining, instructions, gem cutting, plus crystals, minerals, gems and jewelry by certified jewelers.

## Spokane Bar Sapphire Mine & Gold Fever Rock Shop

on Hauser Lake



Russ & Deb Thompson  
4397 Hart Drive  
Helena, MT 59601, U.S.A.  
406 227-8989

---

**Gem Gravel  
Gold Mining  
Jewelry Store  
Faceting  
Sapphire Digging  
Sapphire Gravel Concentrate**

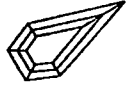
Shipped UPS



Russ & Deb Thompson  
 4397 Hart Drive  
 Helena, Montana 59601, U.S.A.  
 406/227-8989

# SPOKANE BAR SAPPHIRE MINE & GOLD FEVER ROCK SHOP

**OPEN YEAR ROUND**



**ROCKS**

Agate  
 Mica

**Crystals of:**

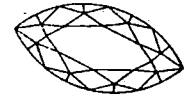
Sapphire • Garnet  
 Quartz • Tourmaline  
 Epidote • Ruby  
 Copper Nuggets  
 Gold Nuggets  
 Faceting Grade Rough  
 Moss Agate  
 Carving Soapstone



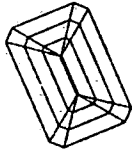
**SHOP**  
 Jewelry

**GEM GRAVEL**  
 Sapphire Gravel  
 Garnet Gravel

**FACETING**



**MINING**  
 Digging for Sapphires & Gold

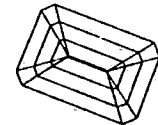


**SAPPHIRES**

**GEOLOGICAL  
 FIELD TRIPS**



**CUT STONES**



**RECORD FINDS**

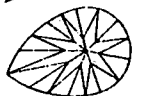


**GOLD PANNING**

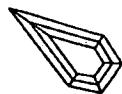
**PETRIFIED DRIFTWOOD  
 SAPPHIRE MATRIX**



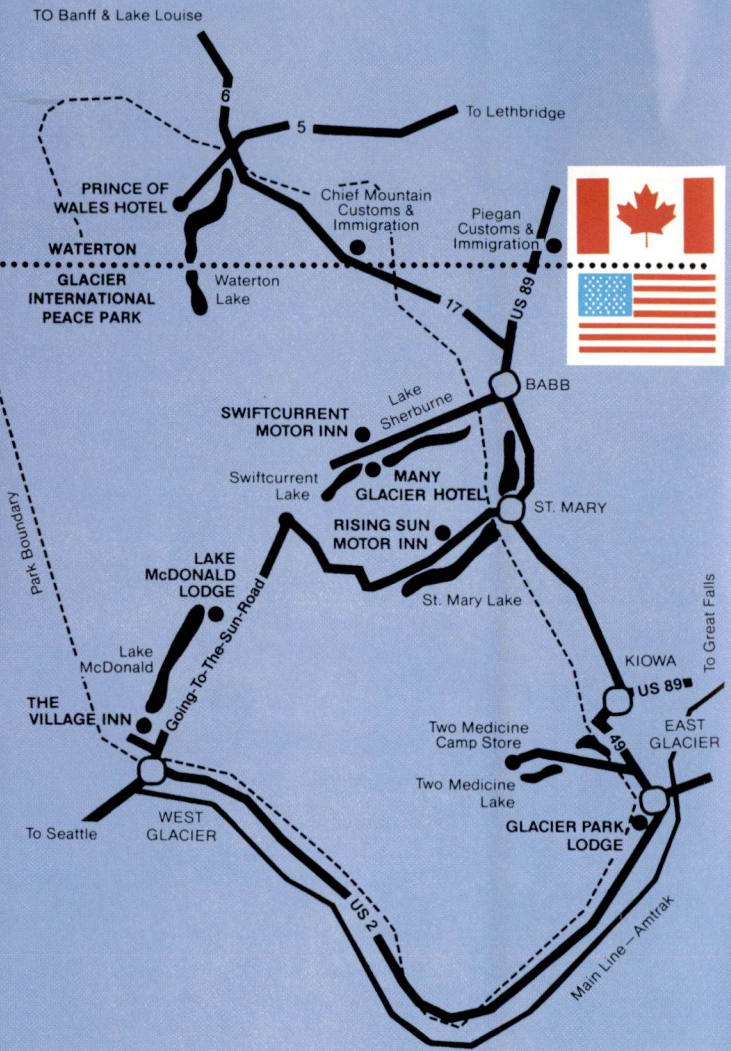
**PROSPECTING**  
 Sapphire Digging  
**TOURS**  
 of Sapphire Mine  
 Tourist Information



Gem Cutting  
 Gem Setting  
 Gem Grading  
 GIA Certified



**MINING**



- Fine dining
  - Cocktail lounges
  - Dancing
  - Musical entertainment
  - Ranger/Naturalist programs
  - Gift and curio shops
  - Camp stores
  - Convention facilities
  - Golfing
  - Horseback riding
  - Fishing
  - Swimming
  - White water rafting
  - Backpacking trips
  - Picnic areas
  - Launch cruises
  - Sight-seeing from antique scenic coaches
- Service stations
  - Visit the Museum of Plains Indian and Montana Wildlife in Browning
  - Hayride/Steak cookout
  - Goat Lick Steak & Rib House
  - Nine-Hole Pitch 'n Putt
  - Ranger/Naturalist campfire talks
  - Complete catering facilities

RESPONSIBILITY: Glacier Park, Inc. and selling agents act only in the capacity of agents for the passenger in all matters pertaining to accommodations, activities and transportation whether by airplane, railroad, bus or automobile, and as such, they shall not be liable for any injury, damage, loss, accident, delay or irregularity which may be occasioned either by reason of any defect in any vehicle, or through the acts or default of any company or person engaged in conveying the passenger, or in carrying out the arrangements of the tour, or otherwise in connection therewith. The passage contract in use by the airline and/or any other transport company concerned with issue shall constitute the sole contract between the airlines and/or other transportation company and purchaser of this tour and/or passenger.

For Reservations or Tour information  
**SEE YOUR TRAVEL AGENT**  
 or contact

Glacier Park, Inc.  
 Mid September to Mid May  
 Greyhound Tower  
 Station 5510  
 Phoenix, AZ 85077

Reservations: (602) 248-6000  
 Administration: (602) 248-2600

or  
 Mid May to Mid September

East Glacier Park, Mt. 59434-0147

Reservations: (406) 226-5551  
 Administration: (406) 226-9311

Montana In-State Watts: 800-332-9351

All rates for tour packages are subject to change without notice

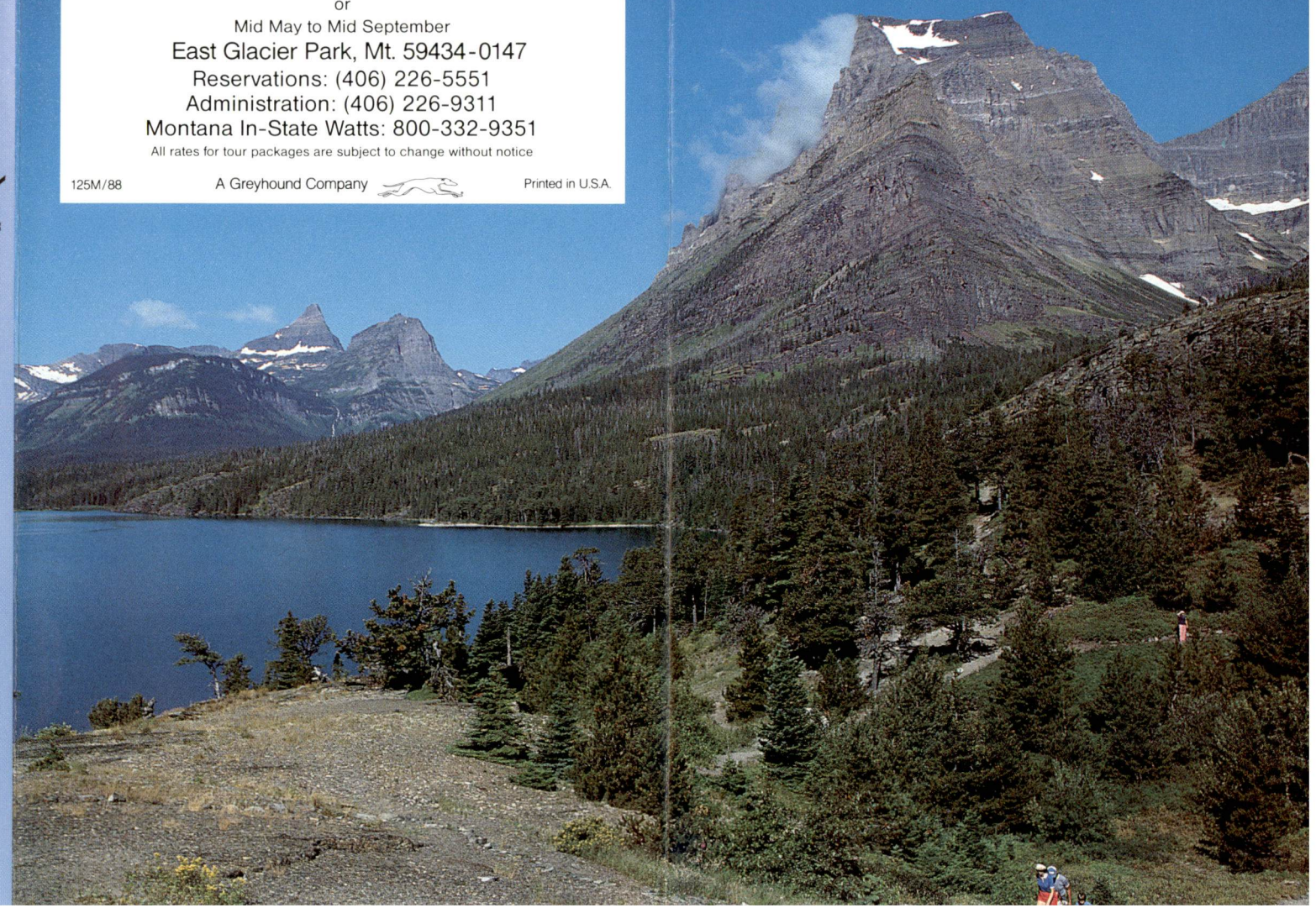
125M/88      A Greyhound Company       Printed in U.S.A.

# Glacier

## NATIONAL PARK

## MONTANA

# A Place Touched By Magic



## Many Glacier Hotel

Built in 1914, Many Glacier Hotel is located on the shore of Swiftcurrent Lake at the foot of Grinnell Glacier. With more than 200 rooms, Many Glacier is the Park's largest resort.

A Swiss motif prevails here. Colorful flags representing each of the Swiss cantons decorate the dining room.

Many Glacier Hotel also boasts a special tradition dating back to the early 1960s, as students recruited from drama and music departments of over 200 colleges stage entertainment including excerpts from Broadway musicals, concerts, sing-a-longs and serenades.

The "curtain goes up" on similar entertainment at Glacier Park Lodge, Lake McDonald Lodge and the Prince of Wales Hotel.



## Lake McDonald Lodge

Situated on the west side of the park, Lake McDonald Lodge, a complex of 101 rooms, has an atmosphere of the Old West. Built in 1913 as a private lodge, the hotel's paneled lobby sports trophies of mountain goat, elk, moose and sheep and a fire burns throughout the season in a massive fireplace decorated by pictographs that are alleged to have been drawn by famed Montana cowboy artist, Charles Russell.

## The Prince of Wales Hotel



This magnificent 81-room gabled structure has three-story high lobby windows that look out on a chain of lakes that stretches to the horizon.

Here English high tea is served every afternoon and guests also enjoy the opportunity to browse in a gift shop that is known for its fine bone china and exquisite woolens.



## Accommodations

The hotel and motel facilities at Glacier Park offer a wide variety of guest accommodations that range from standard and deluxe rooms and cabin units to attractive suites.

## The Inns

Complementing the four main lodges and hotels, are three smaller inns that bring the total number of guest rooms available throughout the park to over 700.

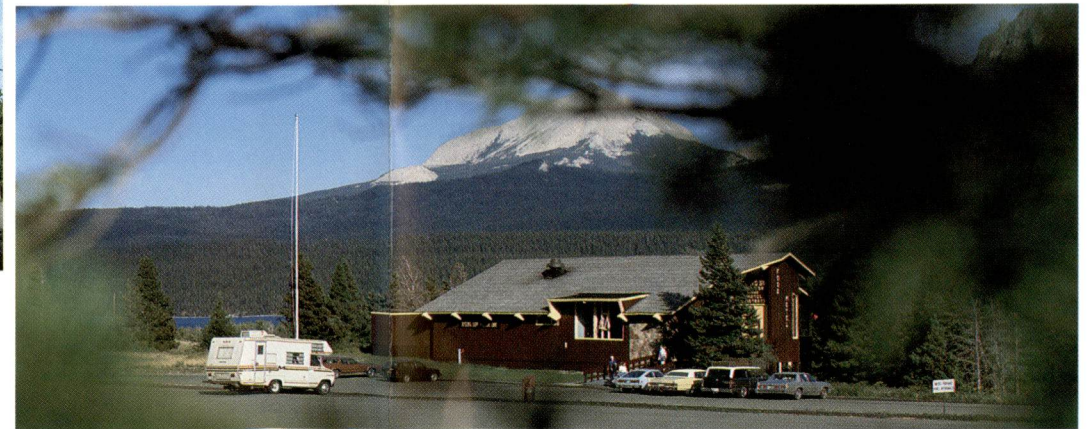


Swiftcurrent Motor Inn, above, is situated in the center of the park near Swiftcurrent Lake and offers 88 motel rooms and cabin units that supplement the accommodations at Many Glacier Hotel.

*Camp store and coffee shop facilities are located at both Rising Sun Motor Inn and Swiftcurrent Motor Inn.*

The Village Inn, above, is a 36-room facility located just inside the west entrance to the park. Overlooking spectacular Lake McDonald, this modern inn offers a number of rooms complete with kitchen facilities.

Rising Sun Motor Inn, below, is a 72-room motel and cabin facility located in a popular campground area that offers a beautiful view of St. Mary's Lake.



# Glacier

## NATIONAL PARK MONTANA

Welcome to Glacier National Park—a land of awesome peaks and thundering waterfalls, of emerald glacier lakes and an abundance of wildlife. Man does not dominate here—he is only a pilgrim in this ancient wilderness that has endured for eons, witness to the gradual overthrusting of mountain ranges and the silent footfall of the Indian.

Glacier Park, the fourth largest national park in the lower 48 states, is famous for its majestic Alpine scenery with 50 glaciers and more than 200 sparkling lakes. An adventurer's paradise, this inspiring backcountry has more than 700 miles of horse and foot trails to satisfy even the most avid hikers and explorers.

Glacier National Park and its Canadian counterpart, Waterton Lakes National Park, comprise 1.4 million acres of breathtaking beauty—a wilderness of Alpine meadows carpeted in yellow columbine and pink harebell and icy fortresses that for centuries was the hunting ground of ancient Indian tribes.

Whether you choose to see Glacier from the vantage point of your hotel veranda, astride a horse or by foot roaming its quiet trails, Glacier is a return to unspoiled America. It is truly a place *touched by magic*.



# Glacier Park Lodge

Built nearly three quarters of a century ago, historic Glacier Park Lodge is located just outside the eastern boundary of the park.

Sixty immense timbers, which were 500 to 800 years old when cut, were used in the construction of this imposing 155-room lodge nestled at the foot of Squaw Peak Mountain. The huge 40-foot long timbers supporting the lobby are

Douglas fir, while those used to support the verandas are cedar.

At the time these enormous timbers were set in place with their bark still intact, the awestruck Indians dubbed Glacier Park Lodge, "Oom-Coo-La-Mush-Taw," The Big Tree Lodge. Steeped in history and lore, this unique lodge has hosted kings and princes, presidents and diplomats.



## The Perfectly Natural Setting For Any Meeting

Glacier Park Lodge offers newly redecorated, up-to-date meeting and convention facilities for groups of up to 300 people.

In addition to a quiet, distraction-free setting, we offer a team of professionals who bring meticulous attention to planning a meeting. Every detail from ground transportation to audio-visual equipment to outstanding menu-planning is in



the hands of individuals who are dedicated to making every meeting a total success.

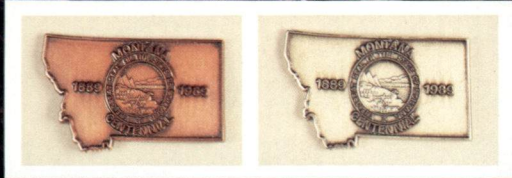
And when meetings aren't in session, guests can enjoy golf on the challenging nine-hole course, a heated swimming pool, hiking, horseback riding and boating. Or less strenuous activities such as sightseeing on board one of the park's many scarlet antique coaches, and evening entertainment.



OFFICIALLY SANCTIONED

Bronze

Sterling Silver



ACTUAL SIZE



Gold Plate

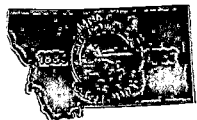
# LAPEL PINS



# A Special Offer to Special People

Centennial '89 Inc. is pleased to present this official Montana Statehood Centennial Lapel Pin. This beautiful pin is a unique idea for yourself or as a gift for someone special. Celebrate Montana's 100th birthday and wear this sanctioned lapel pin.

Wear this jewelry quality lapel pin which is Officially Sanctioned by the Montana Centennial Statehood Commission. Each pin is individually numbered. Order yours today at introductory prices.



**STERLING SILVER**

\_\_\_\_ Quantity \$25.00 ea \$ \_\_\_\_\_

**GOLD PLATE**

\_\_\_\_ Quantity \$22.50 ea \$ \_\_\_\_\_

**BRONZE**

\_\_\_\_ Quantity \$20.00 ea \$ \_\_\_\_\_

PLUS POSTAGE & HANDLING \$ 2.00  
TOTAL \$ \_\_\_\_\_



Send Check or Money Order to:  
**CENTENNIAL '89 INC.**  
P.O. Box 8900  
Helena, MT 59604  
Phone (406) 443-2883  
(406) 449-4881

Please print  
NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

MONTANA—A STATE OF EXCITEMENT.

# Yellowstone

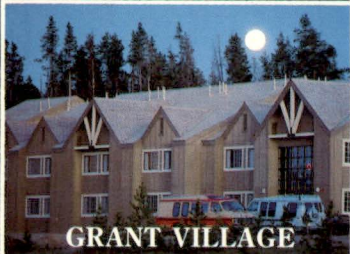
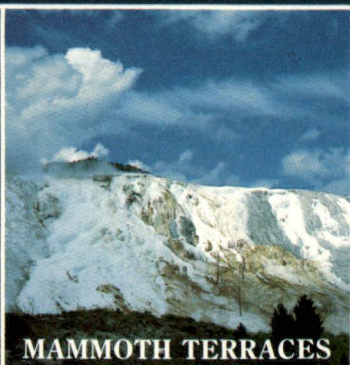
NATIONAL PARK

Your Summer & Winter  
Vacation Destination

**OLD FAITHFUL**

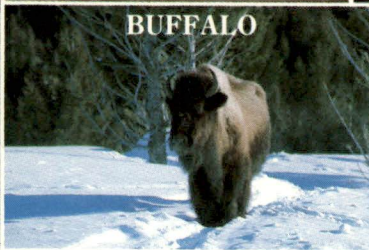


**MAMMOTH TERRACES**



**GRANT VILLAGE**

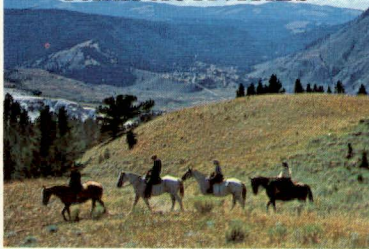
**BUFFALO**



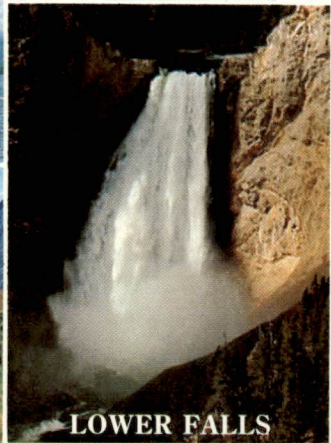
**LAKE YELLOWSTONE**



**PARK ACTIVITIES**



**SNOWCOACH**

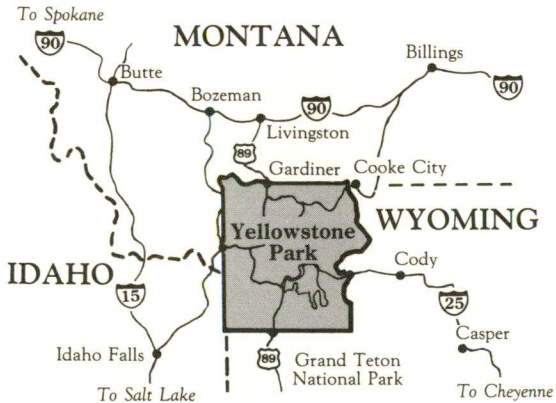


**LOWER FALLS**

# YELLOWSTONE NATIONAL PARK

Two and a quarter million acres of park lands protected for your enjoyment. Thousands of thermal features, wild animals, mountains, lakes and rivers. Yellowstone is the world's first National Park. Open both Winter and Summer. IN-PARK Accommodations range from historic to modern. Activities available: horseback trips, boat tours and rentals, cookouts by stagecoach and wagons and bus tours.

*Don't you wish you were here?*



PLACE  
STAMP  
HERE

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

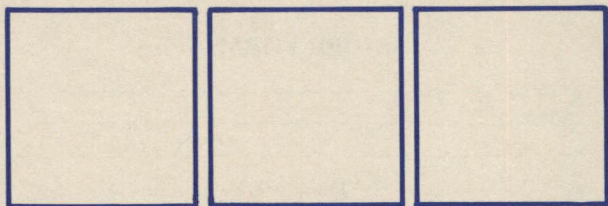
CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_

***For reservations and rates call: (307) 344-7311***

or write TW Services, Inc., Yellowstone National Park, Wyoming 82190

TW Services, Inc., Subsidiary, Canteen Corporation, Authorized Concessioner of the National Park Service.



*Great gifts  
for family and friends—  
and a great way to support  
the 1989 Statehood  
Centennial!*

**CENTENNIAL ACRES**

*Give an inch—or two or three or four or more! Each handsome, personalized 8"x10" deed "officially" entitles the recipient to one square inch of the Treasure State. Available in Headwaters, Homestead, Bannack or Glacier Acre: \$10*

**LAPEL PINS**

*Enamel on metal lapel pins with Centennial logo. Large (1") or small (3/4"): \$2.50*

**TREASURY WARRANTS**

*Original warrants issued in the late 1800s. Territorial warrant (mounted): \$15. State warrant (unmounted, limited quantity): \$20*

**CAPITOL GRANITE**

*Original granite from the State Capitol building. Paperweights, pen sets, and other items. Call 444-1989 for information.*

## ORDER FORM

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

NO.

TOTAL

\_\_\_\_\_ Centennial Acres @\$10 ea. \_\_\_\_\_

(complete information below)

\_\_\_\_\_ Large lapel pins @ \$2.50 ea. \_\_\_\_\_

\_\_\_\_\_ Small lapel pins @ \$2.50 ea. \_\_\_\_\_

\_\_\_\_\_ Territorial warrants @ \$15 ea. \_\_\_\_\_

\_\_\_\_\_ State warrants @ \$20 ea. \_\_\_\_\_

**TOTAL \$** \_\_\_\_\_

*Add gift orders if necessary.*

.....  
 Headwaters Acre  Homestead Acre  Bannack Acre

Glacier Acre

Name on deed: \_\_\_\_\_

Address: \_\_\_\_\_

Optional gift line inscribed below name: "A gift from..."  
\_\_\_\_\_

Mail to:  Purchaser  Recipient

.....  
 Headwaters Acre  Homestead Acre  Bannack Acre

Glacier Acre

Name on deed: \_\_\_\_\_

Address: \_\_\_\_\_

Optional gift line inscribed below name: "A gift from..."  
\_\_\_\_\_

Mail to:  Purchaser  Recipient

.....  
Please make checks payable to Montana Statehood  
Centennial and mail to:

Centennial Office  
PO Box 1989, Capitol Station  
Helena, MT 59620

# REWARD!

## 10% OFF

to anyone who  
finds  
Tinpan Traders  
in  
Historic  
Reeder's Alley



# TINPAN TRADERS

- Centennial leather products & jewelry
- Agate & Crystal jewelry
- Handpainted gold pans
- Gold pan jewelry
- Rattlesnake products
- Centennial cattle drive products
- Made in Montana & Centennial products

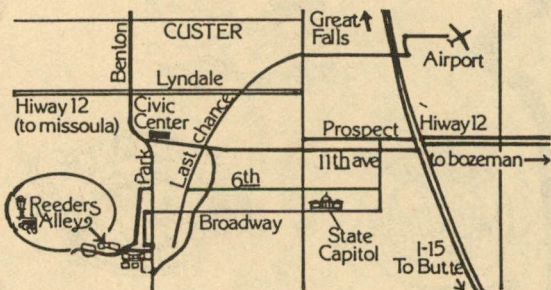
Come visit us in Reeder's Alley  
113 Reeder's Alley  
**443-7435**

## Summer Hours

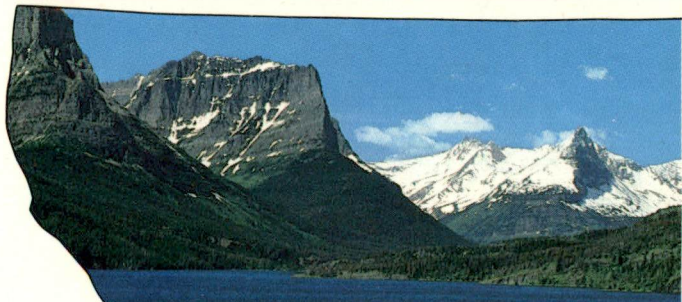
9:00 - 9:00 Monday - Saturday  
10:00 - 6:00 Sunday

Call for winter hours

**443-7435**



# MONTANA



**BIG SKY—100 YEARS**

**MONTANA**

*Celebrate the state's first 100 years. Enjoy the Historic Gold Country, the grandeur of Glacier National Park, the abundant wildlife, wide open space and rich western flavor.*

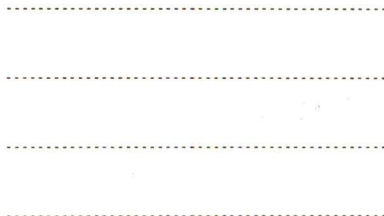
*RC37-Color Photos: Diane Ensign (top left)  
Mark Haun (lower left)*

— Distributed by Billings News Inc., Billings, Montana —

**TR**  
MIKE ROBERTS  
COLOR PRODUCTIONS  
OAKLAND 94623



B17855



Montana Historical Society  
6th and Roberts  
Helena, MT 59620

Place  
Stamp  
Here

# MONTANA

The Magazine of Western History

Montana Historical Society  
Circulation Manager  
225 No. Roberts  
Helena, MT 59620

# MONTANA

The Magazine of Western History

## DISCOVER MONTANA'S EXCITING PAST!

Montana the Magazine of Western History has been published since 1951. It is the most widely read magazine of its kind in this country. Four times a year you'll receive issues that cover the history of Montana and the West in fully illustrated articles about the people and events that shaped this region. Subscriptions include membership in the Montana Historical Society and members also receive the MONTANA POST, our newsletter. Fill out the order blank below. JOIN THE MONTANA HISTORICAL SOCIETY TODAY!

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

- 1 year @ \$18.00
- 2 years @ \$30.00

- payment enclosed
- please bill me

Montana Historical Society • 225 N. Roberts • Helena, MT 59620

# The Economist

2-8 September 1989 • UK £1.50 • USA \$3.00 • Canada C\$3.75 • FF20  
DM6.00 • Lire5,500 • FL7.00 • BF130 • Dkr24 • Nkr23 • Skr24 • ASch48 • SFr6.00 • Pts400

ANTITRUST RETURNS

page 63

AFTER VOYAGER

pages 17 and 79

JAPAN'S NEW MEGA-BANK

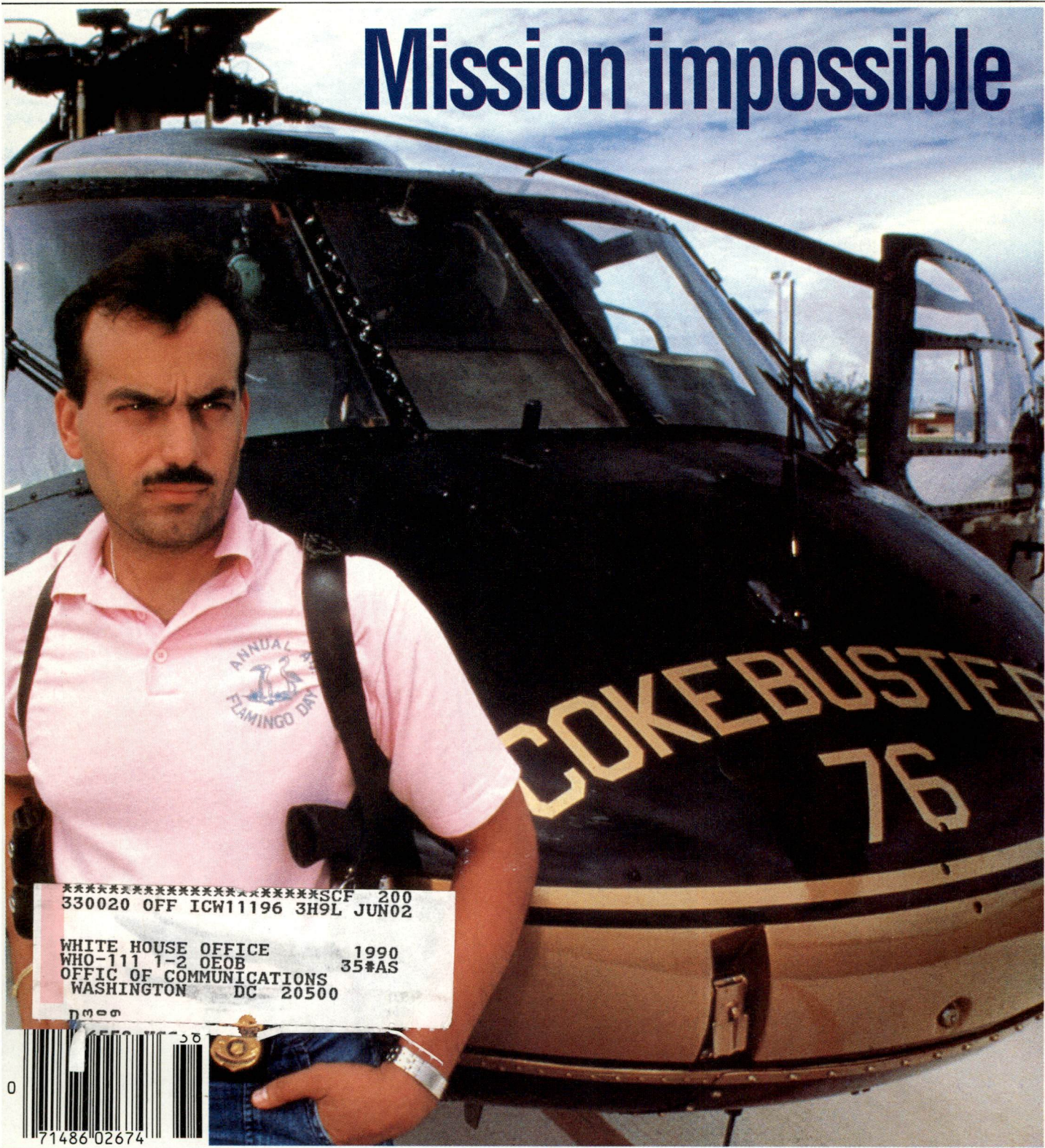
page 71

COSTING THE EARTH

after page 52

A survey of the environment

## Mission impossible



\*\*\*\*\*SCF 200  
330020 OFF ICW11196 3H9L JUN02

WHITE HOUSE OFFICE 1990  
WHO-111 1-2 OEOB 35#AS  
OFFICE OF COMMUNICATIONS  
WASHINGTON DC 20500



71486 02674

*"When a company has a name as well-known as Westinghouse, people think they know what you do."*

# Westinghouse Today.

*"People think we still make appliances. We haven't made them in nearly 15 years.*

*"People think we still make light bulbs. We haven't made them in over six years.*

*"And some people think we're still in the same businesses we were 100 years ago. Well, we are and we aren't.*

*"Westinghouse is a company committed to quality, doing surprising things that touch people's lives in surprising ways—all over the world.*

*"We're a company you should get to know better."*

*John C. Marous*

John C. Marous  
Chairman and  
Chief Executive Officer

## Financial Services One of America's top six business finance companies.



Westinghouse Credit and its financial service affiliates offer a wide range of services. Including capital for business expansion, acquisitions and recapitalizations, commercial and residential real estate development, and leasing and financing major equipment and facilities.

We play a major role in employee buy-outs of established businesses. We make equity investments in companies. And buy, sell, and manage income-producing real estate properties.

## Broadcasting

More than 100 million  
people tune in to Westinghouse  
every day.

Westinghouse Group W Broadcasting is one of America's largest, most diversified and fastest growing entertainment companies.

Group W radio stations broadcast to one out of three American homes. In fact, WINS all-news radio in New York is the nation's most-listened-to station.

Our five TV stations are seen in 10 million homes a week, and each is a leader in news and local programming. And the TV Group's NEWSFEED Network is the nation's largest video news service.

We syndicate the hottest new show on children's TV, "Teenage Mutant Ninja Turtles," to more than 140 stations across the country.

And we also distribute more programming via satellite than anybody else. We even market cable TV's popular "The Nashville Network."

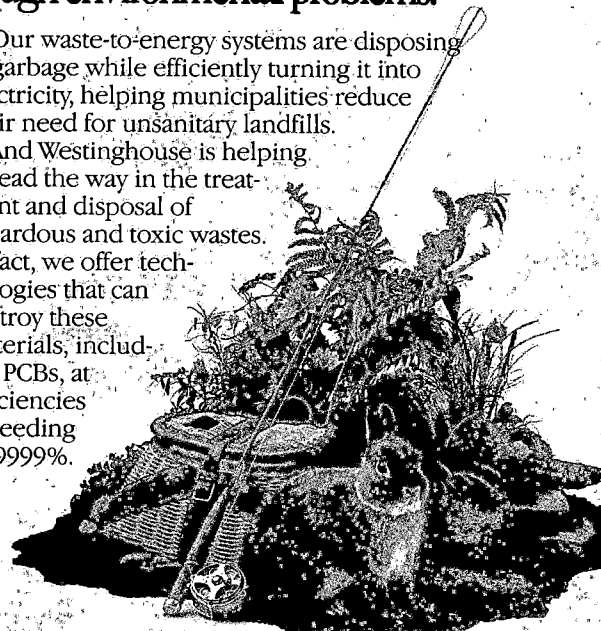


## Environment

A leader in tackling  
tough environmental problems.

Our waste-to-energy systems are disposing of garbage while efficiently turning it into electricity, helping municipalities reduce their need for unsanitary landfills.

And Westinghouse is helping to lead the way in the treatment and disposal of hazardous and toxic wastes. In fact, we offer technologies that can destroy these materials, including PCBs, at efficiencies exceeding 99.9999%.



## Electronics

### The world leader in radar.

Our new radar, soon to be installed at every major U.S. airport, will now allow air traffic controllers to track weather *and* aircraft on the same screen at the same time.

And our advanced air route surveillance radar will give the FAA a much better view of air traffic along major routes, while also serving the U.S. Air Force's air defense needs.

We developed and built the Airborne Warning and Control System (AWACS) radar, part of the free world's first line of defense. And we're working on radar and electronic systems for the U.S. Air Force's and Navy's next-generation fighters.

We even offer industry the most powerful distributed process control management systems available today.

## Communities

### One of America's leading developers of planned communities.



More than 175,000 people live in Westinghouse planned communities.

In the Ft. Lauderdale area, we're in our fifth decade of developing quality cities and communities—including the master-planned, full-service city of Coral

Springs, designed to serve more than 100,000 residents.

Our new community, Gateway, near Ft. Myers, will be the future home to an estimated 40,000 people.

We're planning our newest community of homes, schools, businesses, offices, shopping, and recreation areas on a 5,500-acre site in Marana, near Tucson, Arizona.

Pelican Bay, near Naples, Florida, hosts 1,400 luxury homes, two quality hotels, and a championship golf course. And another luxury community is planned for Palm Desert, California.

## Energy

### A world leader in energy.

We're a recognized world leader in conventional power generation, supplying millions of megawatt hours of electricity on almost every continent.

We're also a leader in nuclear fuel. In fact, our Commercial Nuclear Fuel Division was a winner of one of the first Malcolm Baldrige National Quality Awards.

More than half the free world's nuclear power plants are based on Westinghouse technology. We're developing safer, even more environmentally compatible, advanced nuclear power plants.

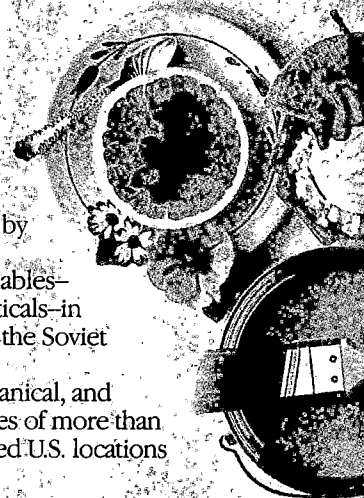
And we're developing new technologies for the future, such as fusion, superconductivity, fuel cells, and solar photovoltaics.

## Distribution

### Moving everything from strawberries to electricity.

Our Thermo King subsidiary is the world leader in transport refrigeration and is supported by the industry's largest dealer network. Thermo King-equipped vehicles safely transport all kinds of perishables—from produce and chemicals to film and pharmaceuticals—in more than 80 countries around the world, including the Soviet Union and China.

We're also a leading distributor of electrical, mechanical, and electronic products, maintaining complete inventories of more than 100,000 items through a network of 230 wholly-owned U.S. locations and over 1,500 independent distributors.



## Office Systems

### Making offices and people more productive.

Westinghouse helped pioneer the concept of open office furniture systems—systems designed to help people do their jobs more productively and comfortably.

We offer a variety of innovative systems-related products, designed around a panel system backed by the industry's only lifetime warranty.

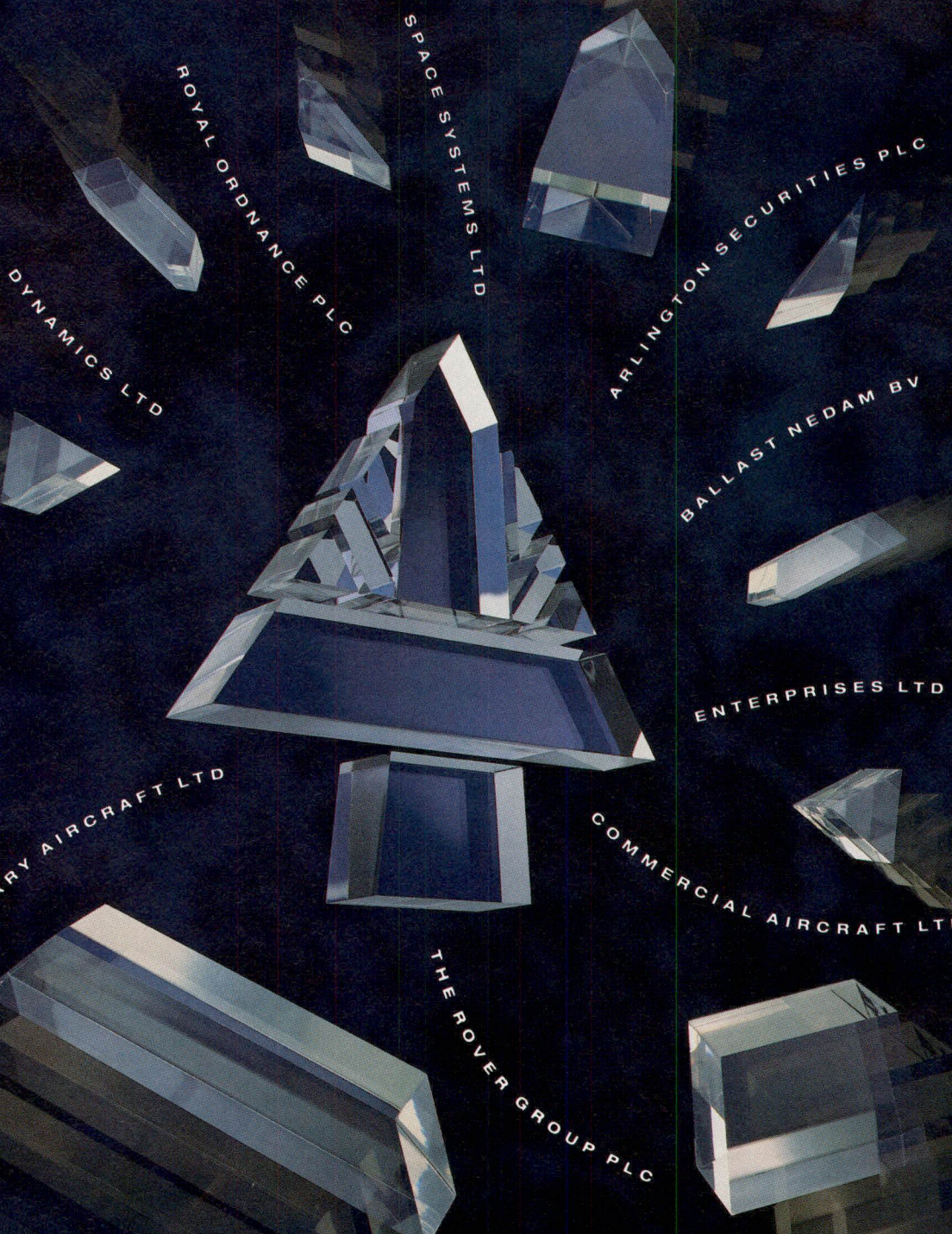
Westinghouse developed and built one of the world's most sophisticated and reliable telecommunications systems for our *own* use.

Now we're offering the industry's only fully-integrated voice/data network capability to businesses, providing them with a unique solution to their telecommunications needs.

*So now that you know Westinghouse a little better, you can see that we're doing important things in important areas. Perhaps we even touched your life today.*

You can be sure...  
if it's Westinghouse 

# Westinghouse



MILITARY AIRCRAFT LTD

DYNAMICS LTD

ROYAL ORDNANCE PLC

SPACE SYSTEMS LTD

ARLINGTON SECURITIES PLC

BALLAST NEDAM BV

ENTERPRISES LTD

COMMERCIAL AIRCRAFT LTD

THE ROVER GROUP PLC

## COMBINED PERFORMANCE

EVERY PRODUCT THAT BRITISH AEROSPACE COMPANIES MAKE IS ENGINEERED FOR PERFORMANCE – IN SPACE, IN THE AIR, ON THE BATTLEFIELD, ON THE GROUND AND UNDER WATER.

EVERY DECISION THAT BRITISH AEROSPACE TAKES IS AIMED AT ENHANCING ITS BUSINESS PERFORMANCE

– IN STRATEGIC PLANNING, IN COST REDUCTION, IN MARKETING, IN MAKING THE BEST USE OF HUMAN RESOURCES.

WHICH EXPLAINS WHY ONE OF THE WORLD'S GREATEST MANUFACTURING COMPANIES IS ALSO ONE OF THE WORLD'S BEST-PERFORMING BUSINESSES.

**BRITISH AEROSPACE**



British Aerospace plc, 11 Strand, London.

## LEADERS

Mission impossible .....	15
The tough in Tehran .....	16
Sure-footed Bush .....	16
After Voyager .....	17
For Britain, a friendly TUC? .....	18
South Africa's travelling salesman .....	19
American stockbrokers: A dispute about disputes .....	20

## WORLD POLITICS AND CURRENT AFFAIRS

### DRUGS

21 It doesn't have to be like this

### AMERICAN SURVEY

- 25 Will New Yorkers re-elect Ed Koch?
- 26 New votes for pro-abortionists
- 27 Barney Frank in trouble
- 27 Now it's hormone-free milk
- 28 A fighting start against drugs
- 29 Jimmy Carter's library
- 30 Turtles versus shrimpers

### ASIA

- 31 Back to the battlefield for Cambodia
- 32 Ever more Vietnamese boat people
- 32 We'll never do a Poland, says Vietnam
- 33 China's conservatives hurtling into the past
- 36 The Afghan guerrillas, losing by not winning
- 36 Japan's Liberal Democrats sink further
- 38 Australia's airlines grounded

### THE ENVIRONMENT

38 Costing the earth: A survey

### INTERNATIONAL

- 39 France's gamble in Lebanon
- 40 Fatigue and the *intifada*
- 40 Mercenaries in Colombia, and beyond
- 41 The greening of the World Bank
- 42 South Africa: F.W. de Klerk goes visiting
- 42 South Africa: Chasing the brown vote
- 44 Kenya's bandit country

### EUROPE

- 45 If two Germanies became one
- 46 German-Polish relations
- 47 The row over nuns at Auschwitz
- 47 Shock therapy for Poland's economy?
- 48 Soviet disunion
- 48 Estonian tensions
- 52 Pre-election Holland
- 52 French spelled simple

### BRITAIN

- 53 This week
- 55 Tense times for British broadcasters
- 56 Murdoch's message
- 56 Unions and productivity
- 57 Strong stuff in the lager market
- 58 Paying for repairs at the National Gallery
- 60 What Japanese tourists do

## BUSINESS, FINANCE AND SCIENCE

### 61 BUSINESS THIS WEEK

#### BUSINESS

- 63 Reviving America's antitrust laws
- 64 Russia discovers hot-air balloons
- 64 Another Alan Bond imbroglio
- 65 Economics focus: China's stockmarkets
- 66 Hongkong's slumping tourist trade
- 66 Hongkong's booming trade fairs
- 67 Britain's Amstrad deflates
- 67 Laptop computers
- 68 America's computer-toting taxmen
- 68 Pan-European TV soap operas
- 69 Europe's car imports

#### FINANCE

- 71 A wedding of Japanese city banks
- 72 Japan's surplus-trimming tourists
- 73 Market focus: Government-bond yields
- 74 Foreigners squeeze into Chile's bourse
- 74 Kohlberg sues Kravis, Roberts
- 75 Double-or-quits in the junk-bond market
- 75 America's regulators patrol the City
- 76 Commodity swaps: Banks' hot new business
- 78 When a utility buys a thrift

#### SCIENCE AND TECHNOLOGY

- 79 Voyager's grand finale
- 80 The spacecraft itself
- 80 Technology reaches the prune
- 82 Spiders' strong silk

#### ECONOMIC AND FINANCIAL INDICATORS

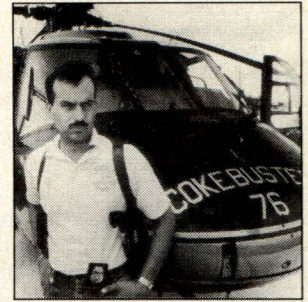
- 99 Output, jobs, prices, commodities, bourses, interest rates, trade, currencies, plus a closer look at coal and exports of capital goods

#### BOOKS AND ARTS

- 83 50th anniversary of the second world war
- 84 Hitler's generals
- 84 The diversities of American religion
- 84 Understanding the Middle East
- 85 In the classroom of planetary exploration
- 86 Edinburgh festival: The orgy of music and arts
- 86 Competitive finance for the fringe
- 87 What one correspondent saw
- 87 The sad story of stained glass

#### LETTERS

- 6 On AIDS and New York, SCM and Hanson, Channel tunnel, Guatemala's vanishing president, Brussels airport, tall bidders

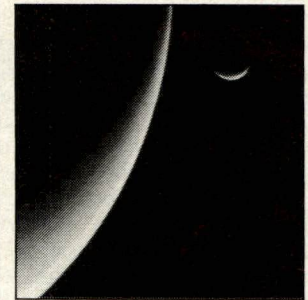


### Mission impossible

Even with American help, Colombia cannot escape from thralldom to drugs, page 15. The argument for legalisation, pages 21-24. America's war at home, page 28.

### Antitrust returns

Bushmen pledge to fight big business, page 63. A European rival to Dallas, page 68.

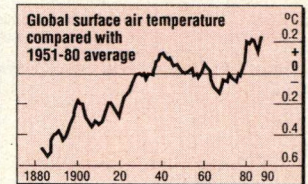


### After Voyager

Science projects for planet earth, page 17. The spacecraft's grand finale, page 79.

### Japan's mega-bank

Mergers are no solution for Japan's big but bloated commercial banks, page 71. Japanese tourists spend the country's investment income, page 72. How they spend it in Britain, page 60.



### Costing the earth

How economics can grow green: a survey of the environment, after page 38. Greener greenbacks at the World Bank, page 41.

### New York's mayor

Hizzoner, again? page 25.

# LETTERS

## AIDS and New York

SIR—You correctly describe the magnitude of the AIDS problem New York city is facing (July 15th), but you are just plain wrong in describing the city's response as "pitiful".

This city has done more than any other in America to respond to the AIDS epidemic. We are spending \$229m in city funds this year. Together with state and federal cash, we are spending a total of \$448m to provide care for affected people.

We distributed condoms widely to reduce AIDS transmission, and closed bathhouses and other public facilities which permit high-risk sexual activity; we were the first city to go to court to ensure that a child with AIDS has the right to attend public school. We provide extra money to those who foster children with AIDS and rental assistance to 1,500 people with AIDS. We operate 84 chronic-care beds for AIDS patients and have a paediatric day-care programme for children with AIDS. We have committed \$50m to build supported housing and health-related facilities for people with AIDS; we established an anti-discrimination unit and have mounted extensive education campaigns. We provide AZT, aerosolised pentamidine, and Bactrim therapies without regard to a person's ability to pay.

But the city cannot fight this epidemic alone. Only the state government can authorise the additional acute and long-term-

care beds or provide extra money to expand outpatient care or require nursing homes to admit AIDS patients.

CARYN SCHWAB  
New York Office of the mayor

## Hanson's way

SIR—You chose as an example of a successful outcome of take-overs the purchase of my former employer, SCM Corporation, by Hanson, at what proved to be a very good price (July 15th). No one can deny the brilliance with which the Hanson operatives played the game in making this acquisition, nor the speed with which Hanson dismembered the company once control had been won. But, as in all business matters, simplistic estimates of the causes of spectacular profits are apt to be misleading.

SCM was not "a troubled company" when Hanson made its bid. Following the abandonment of its European and American office-copier businesses in 1975, the centre of gravity of SCM was deliberately shifted. Research, plant construction and acquisitions were calculated to move SCM towards the chemicals industry, broadly viewed to include the successful Glidden paint business (now owned by ICI) and a newly resuscitated Durkee food-chemicals business (now owned by Unilever). The best of the chemicals businesses built by SCM in the early 1980s is still retained by Hanson, which has simply allowed expansion

plans which were already in place to be carried out.

New York GERARD STODDARD

## Not the ticket

SIR—Your correspondent on the Channel tunnel rail link (August 19th), imagining himself as a senior French technocrat, allowed himself to be easily seduced by the surface charms of Rachel.

Before emerging at Rainham, Rachel seeks to hide herself from public view in a prohibitively expensive tunnel all the way from a junction with the main Channel tunnel beneath Dover.

She would therefore be a more, not a less, expensive companion than the one chosen by British Rail after a long courtship. And it would cost even more to bring Rachel into central London where most people would want to see her.

JOHN WELSBY  
London British Railways Board

## Vanishing president

SIR—Your article on Guatemala (July 8th) erred in stating that General Efraim Rios Montt "ruled ruthlessly as president in the late 1970s." Mr Rios Montt ruled in 1982-83, by military coup and not by election. He directed a campaign against the rural Mayan population that burnt hundreds of villages and killed tens of thousands of Indians.

His regime was not an isolated event in Guatemala, but just one in a continuing series of brutal dictatorships. These dictatorships persist because Guatemala's elites view the dispossessed and poverty-stricken Indian majority as an unending source of rebellion which must be kept under control by all the methods of the modern police state and counter-insurgency army.

You miss the point by suggesting that it makes any difference where, or who, the president is. President Vinicio Cerezo is merely a civilian figurehead in a military government. His whereabouts matter to no one but himself, his assorted mistresses and the United States embassy, which needs a civilian nominally in place in order to justify an increasing flow of military aid to this supposed democracy.

New York KENNETH ANDERSON

## Brussels airport

SIR—"The frontier-freeish reality" (August 12th) rightly draws attention to passengers having sometimes to waste more than half an hour at Brussels airport immigration as each passport is checked against a computer listing: you add that London's Heathrow is a delight by comparison. Brussels appears to be alone in the EEC in requiring immigration officers laboriously to key in passengers' names.

Some years ago European parliamentarians complained about the delays and were given privileged egress through a separate door. May I suggest that this privilege be withdrawn? The result would be to ensure that parliamentarians use their influence for the benefit of all passengers and not just themselves.

Brussels STANLEY CROSSICK

## Little enough



SIR—Regarding your article about bidders' heights, "The taller they come" (August 19th), I think you omitted to complete the headline. As I recall it, the missing words are "... the harder they fall."

London MICHAEL EDWARDES

**The Economist**  
SUBSCRIPTION ORDER FORM  
The Economist  
Subscription Department,  
P.O. Box 58524, Boulder, Co. 80322-8524.

Please enter a subscription for 1 year (51 weeks).....Payment enclosed.....Bill me.....

NAME.....  
TITLE.....  
COMPANY.....  
ADDRESS.....  
COUNTRY..... C898

One year (51 weeks) subscription rates  
United States & Mexico .....  US\$98.00  
Canada .....  C\$127.50  
Students with proof of enrollment  
United States .....  US\$60.00  
Canada .....  C\$78.00

For subscription service outside North America please contact:  
The Economist, Subscription Department  
P.O. Box 14, Harold Hill, Romford, Essex RM3 8EA, U.K.  
In North America call: 1-800-456-6086  
In Colorado call: 1-303-447-9330

Latest Special Report No. 2005  
**South Korea's Industry:**  
**New Directions in World Markets**  
South Korea has emerged as one of the key players in the Far East - but with economic unrest and increasingly protectionist overseas markets, can the country still hope to match the industrial success of Japan? This report examines the role of South Korea in both Far Eastern and global markets - and the opportunities and threats this presents for business operations in the rest of the world.

Price including postage: UK & Europe £175;  
North America US\$345; Rest of World £178.

**The Economist Intelligence Unit**  
Marketing Dept (EDXL) 215 Park Avenue South  
40 Duke Street New York, NY 10003  
London W1A 1DW, UK USA  
Tel: 01-493 6711 Tel: (212) 460 0600

A Division of Business International



# **CHIEF EXECUTIVE OFFICER**

Qantas is a highly profitable major Australian company with international operations spanning the transport and leisure industries. Revenues are in excess of \$3 billion annually and employees total over 16,000.

In the 1980s, increased inbound tourism and pioneering new routes has led to a threefold increase in annual revenues and a fifty percent increase in fleet size. Qantas plans to continue to increase its current fleet and the size and scope of its operations. To achieve this significant growth, substantial new capital will be required.

Reporting to the Chairman and the Board, the C.E.O. is responsible for the profitable operation of this complex organisation.

The C.E.O. will be an individual of stature in the business community with a record of success at Managing Director or equivalent level in a market driven organisation. If this experience were gained outside the transport or leisure industries in, for instance, consumer goods or another service business, it will be viewed equally advantageously. The person will need to be skilled in man management, operations, financial and marketing management. Strategic vision and the ability to negotiate at the highest levels of government and industry are clearly an intrinsic part of the individual's background. Tertiary qualifications are sought.

The compensation package will reflect the standing, position and likely contribution of the successful candidate in this high profile appointment. Location is Sydney, Australia.

Replies in writing should be addressed to:  
The Managing Director,  
Russell Reynolds Associates Inc.,  
Suite 1902, AMP Centre,  
50 Bridge St., Sydney, NSW 2000, Australia

## CHIEF EXECUTIVE NEW ZEALAND SERIOUS FRAUD OFFICE

- ★ *Auckland Based*
- ★ *Foundation Role*
- ★ *Prominent Position*

The Government has approved the immediate establishment of the Serious Fraud Office. This Government Department will be responsible for the effect and timely investigation and prosecution of substantial fraudulent offending, particularly that involving corporate entities. We are seeking a Chief Executive to establish and subsequently manage the office's activities towards the achievement of its objectives.

For this important post a unique blend of qualifications, experience and achievement are sought. The appointee is likely to have:

- A tertiary qualification in either Accounting, Law or Commerce.
- A proven record of achievement demonstrating the knowledge and skills relevant to the investigation and prosecution of complex fraud particularly involving the corporate sector.
- Proven skills in leadership, motivation and negotiation.
- Strong intellectual, strategic and tactical planning abilities.
- Good experience in the area of general and Government administration, resource management and policy implementation.
- The ability to analyse objectively and appraise complex issues.
- Relocation costs will be met.
- Excellent communication and representation skills.
- Ability to manage change.
- The ability to work effectively with senior managers in the government and private sectors.
- Ability to lead a team of multi-disciplinary, highly skilled professionals.
- Ability to manage the office from Auckland while maintaining an effective relationship with the Attorney-General.

The successful candidate will be rewarded by:

- An attractive compensation package.
- A chance to establish an effective team.
- A challenging role.

The appointment will be made under the terms of Section 35 of the State Sector Act 1988. The Office will be committed to equal opportunity in the workplace.

Applications close 15 September 1989.

For further information in strict confidence, please telephone Trevor Dunn at Morgan & Banks Ltd Wellington New Zealand on (04) 734 073 (days) or (04) 339 759 (evenings) or fax a brief résumé on (04) 721 171.

## Outstanding Career Opportunities in Marketing

### The Company

The Company is Modern Industries Co, a joint venture with the Procter & Gamble Company of the USA with a Head Office in Jeddah, Saudi Arabia. MIC is the Arabian Peninsula's leading manufacturer and distributor of detergents and personal care products such as Tide, Ariel, Pampers, Crest, Head & Shoulders, Camay and many other top household brands.

Worldwide sales by Procter & Gamble, one of the world's largest and most successful manufacturers of packaged consumer goods, were over US\$ 20 billion last year. Procter & Gamble manufacturers household detergent products, personal care products, paper products, pharmaceuticals, and foods and beverages.

### The Opportunities

We are looking for outstanding young men who are eager to make a career in marketing and general management within a first class international business. If you are a thinker and a doer, thrive on hard work and have the ability and ambition to succeed, you belong with MIC/Procter & Gamble. Promotion is only from within, offering outstanding opportunities for rapid career growth.

**The Job:** Brand and Marketing management are the functions for which you will be trained. You will become a key player in a dynamic team of professionals in Jeddah, Saudi Arabia. Your career will start as a Brand Assistant located in Jeddah, Saudi Arabia, but are likely to get a temporary training assignment for a one or two year period in Geneva, Switzerland. In this position you will share with your young manager the overall objective of building the Company's business. You will be assigned challenging jobs from the start and as your knowledge and experience grow, your responsibilities will likewise increase until you are handling key projects on your own. Your progress is entirely up to you and your ability to take charge. By the time you are a Brand Manager you will be the initiator of all actions taken to build the business of the brand(s)/market(s) for which you are responsible.

**Progress:** Your further progress will depend entirely on you. Your scope of activities and responsibilities will broaden with time until, given the outstanding progress we want to make, you are ready to assume a position in general company management.

**Training:** Many independent experts in America and Europe regard P&G's marketing skills and training as the best in the world. Training will primarily be on-the-job. Your manager will guide you so that you learn fast and can soon do important parts of his job.

**Salary:** An attractive starting salary will be paid and will increase as quickly as your progress.

### The Right Person for the Job

You will probably have an MBA. But more importantly, you will be an intelligent, ambitious, articulate and dynamic young person with a strong record of achievement in your academic, extra-curricular and/or professional activities to date. You must have a very good command of written and spoken English. Your knowledge of Arabic is a definite plus. You will probably be between 22-30 years of age.

**Application:** If you are interested in this career opportunity and are available to start work immediately or within 1989, write briefly, in English, stating your background, qualifications and experience, to:

Mr Ph Nithart—Personnel Department  
Procter & Gamble AG  
1, rue du Pré-de-la-Bichette  
1211 Genève 2-Switzerland  
Tel: 022/730 31 11

All replies will be treated in strict confidence and will be acknowledged.

## PRODUCE STUDIES OVERSEAS DIVISION

### SPECIALIST IN AGRICULTURAL MARKETING AND ECONOMICS

The Overseas Division of PSL undertakes consultancy assignments in and for developing countries in the broad area of marketing and business development in agriculture, horticulture and the food industry.

A vacancy exists for a Senior Executive.

Candidates should have considerable overseas experience and team leadership qualities. Age is not crucial but 30's is preferred.

The position is based in Newbury and involves an attractive remuneration package including car and benefits.

Applications, including CV, should be sent to:

**Produce Studies Ltd**  
**Overseas Division**  
**Northcroft House**  
**West Street**  
**Newbury, Berks**  
**RG13 1HD, UK**  
Fax: Newbury (0635) 43945



INTERNATIONAL POTATO CENTER (CIP)

### DIRECTOR GENERAL

The Director General is the chief executive of the International Potato Centre with headquarters in Lima, Peru.

CIP is one of the thirteen international research and training centres supported by the Consultative Group on International Agricultural Research (CGIAR) and is a non-profit, autonomous institution established to develop and disseminate knowledge for the greater use of root and tuber crops as a basic food for the developing world.

The present Director General will retire in April 1991 and the Board of Trustees has begun an international search for his successor. The Board plans to identify the successful candidate by September, 1990, and the appointment will commence early in 1991.

The new Director General of CIP will possess a proven record in management and administration; extensive experience and high qualifications in agricultural research; a sound knowledge of and experience with agriculture in developing countries; vision and leadership qualities and an ability to communicate and inspire high performance from scientists and administrators of different nationalities and disciplines.

A competitive salary with fringe benefits will be offered. Requests for further information should be directed to the Chairman of the Search Committee, David L. Call, Dean, College of Agriculture and Life Sciences, Cornell University, Roberts Hall, Ithaca, New York, 14853, USA. (Fax 607-255-0788).

Applications for the position should be forwarded (preferably before October 20, 1989) to:

CIP Search Committee, c/o Dr J. W. Meagher, 3 Kingfield Court, Burwood, Vic. 3125 AUSTRALIA. Fax: 61 38885159. Telex: AA 30625. Attention ME 3715.

### ACADEMIC DIRECTOR AND DEAN

The International Management Center (IMC), an internationally funded organisation for developing and promoting Western management skills and techniques through management training, research, consultancy, and conferences, began its operation in November 1988 in Budapest, Hungary.

IMC offers a full range of management training programs for young, middle-level and senior managers from Hungary, and, in limited numbers, from other East European countries and the Soviet Union. International economic conferences, business meetings, and workshops are organised and hosted by the Center.

IMC is seeking an Academic Director and Dean to assume overall responsibility for the developing and staffing management training programs, and research activities and to work closely with the consulting and conference unit at the Center. Qualified candidates must have expertise in executive management education and innovative instructional methodology, as well as experience in intercultural education. International experience and awareness of centrally planned economies are recommended. In addition, candidates must have had working relationships with selected business schools, management training centres and corporate training centres in a number of Western countries. We are looking for energetic, innovative, entrepreneurial, and strategic-minded candidates.

The appointment is for a minimum of 12 months, beginning in June 1990. Remuneration is highly competitive and will be based on the candidate's qualifications and experience. Housing and moving expenses are provided. Applications should be accompanied by a résumé and three names of references and their phone numbers before 30 September 1989.

Please submit all applications to: c/o Dean Search Committee International Management Center, 1775 Budafok 1, PO Box 113, Hungary.

# UNSW

THE UNIVERSITY OF NEW SOUTH WALES



Equality of employment opportunity  
is University policy

UNIVERSITY COLLEGE  
**Australian Defence Force Academy**  
CANNBERRA A.C.T. AUSTRALIA

### Lectureship in Economics and Management

(TENURABLE)

Department of Economics and Management  
Ref: Z100.013.726

The Department seeks applications from candidates qualified to teach quantitative methods including statistics, econometrics and forecasting to undergraduate and post-graduate students. An ability to teach courses in macroeconomics, finance or industrial organization would be a distinct advantage. The Department offers undergraduate majors in both economics and management, a Masters degree by course work in Management Economics with majors in logistics and project management and Masters and Ph.D. degrees by thesis. Postgraduate students include civilians and military personnel. The Department of Economics and Management is strongly committed to scholarly research. Its facilities include a Prime 9750 Super-Minicomputer as well as a Management Training Laboratory equipped with IBM PCs for student use. Members of the Department have full access to the wide range of research materials available in the Canberra area. The position is available from 1 February, 1990 and appointment will be on the basis of a contract with provision for conversion to tenure.

Salary: **A\$31,259-A\$40,622 per annum.** Further information from Dr P. Robertson 61 62 68 8841. Applications close 13 October, 1989.

Written applications quoting reference number, should be sent to the Asst. College Secretary (Personnel) University College, University of New South Wales, Australian Defence Force Academy, Northcott Drive, CANNBERRA ACT 2600 AUSTRALIA. Include contact number during business hours and names and addresses of two referees. For acknowledgement of application telephone 61 62 68 8726.

## Managing Director

AGRICULTURAL & COUNTRYSIDE  
PLANNING CONSULTANCY

### Reading

Travers Morgan is a major group of multi-disciplinary consultants with a nationwide network of regional offices. As part of our continuing development, we are seeking applications from suitably qualified professionals for the post of Managing Director of our Rural Consultancy Division.

The Division, Michael Boddington & Associates, is a well established consultancy in the field of agriculture, agricultural economics, environmental assessment and countryside planning. It is located in the Group's offices in Reading.

The Managing Director will be expected to carry out the day-to-day administration of the practice, to relate to other Divisions within the Travers Morgan Group, and to undertake professional work within his discipline.

It is expected that applicants will have a professional qualification relevant to the Division's area of operation and will have a track record of successful business management. A business qualification would be an added advantage.

The post will carry a salary commensurate with qualifications. It will be not less than £25,000 per annum, and will also qualify for other benefits, such as a company car, and membership of the Group pension scheme.

Apply in confidence, quoting reference REC/3D/1 with full curriculum vitae, to:

**Brian Daniel**  
Director of Personnel  
Travers Morgan Consulting Group  
Mead House  
Cantelupe Road  
East Grinstead  
West Sussex RH19 3DG

**TRAVERS  
MORGAN**

**Business  
International**

GLOBAL BUSINESS INFORMATION AND ADVICE

## MANAGER, EDITORIAL SERVICES

**£22K-£24K (plus excellent benefits)**

Business International, a member of the Economist Group, is the world leader in the provision of global business information and advice. In the Western Europe unit we provide these services to the world's leading corporations on management issues with specific reference to business developments in Europe. We deliver these services through newsletters, research reports, conferences, briefings and bespoke research.

Demand for these services has created an opening for an experienced manager to join our team, with specific responsibility for our expanding research report business. This will also entail involvement in conferences to launch some of the reports.

The successful candidate will have outstanding writing and editing skills, commercial acumen and a strong interest in, and understanding of, management issues. He or she will have had at least five years' experience in publishing, journalism or in a consultancy which will have provided them with a broad knowledge of European business and management issues.

Please writing enclosing full career and salary details to: **Anne Dean, Group Personnel Director, Business International, 40 Duke Street, London W1A 1DW**

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

## SENIOR FINANCIAL SECTOR AND BANKING ECONOMIST

**Salary:** *Negotiable, based on earnings record and experience.*

**Benefits:** *Highly competitive including furnished housing, utilities and other benefits.*

**Base:** *Kinshasa, Zaire.*

USAID is one of the world's largest bilateral economic development agencies. Its fully staffed Zaire mission is currently seeking a senior bilingual French-English economist with extensive high level experience in international finance and banking.

This senior position has been newly established to provide a range of advisory, research and evaluation services as part of a major multi-year Private Sector Support Program financed directly by USAID which provides for important reforms in Zaire's finance and banking sector.

Applicants should have high level experience in international economics, finance and banking, preferably in both the public and private sectors. Experience in developing countries is essential. Francophone country experience highly desirable. The successful candidate will demonstrate an ability to work at senior government levels on major economic, structural adjustment and central banking issues. Ability to present ideas effectively in written and spoken French and English is essential. Minimum of MA/MS in economics, finance and banking, business, or related field is required.

Please reply in writing with full CV and references with current addresses and telephone numbers to:

**Arnold Lessard, Private Sector Officer,**  
USAID/Zaire,

APO New York 09662-0006, USA, or BP 8599, Kinshasa 1, Zaire

Closing date for applications: September 30, 1989

# EUROPE 1992. BRITAIN NOW.



Britain is already by far the Number One location in Europe for US companies. By 1992 there will be no internal barriers to trade in Europe, making it a genuinely single market. A home market with as many consumers as the US and Japan combined. Find out more about Britain's advantages for your business as the base for tariff-free access to the European Single Market.

If your company is considering locating or expanding a facility in Europe, we can arrange a personal Briefing on Britain for you from our nationwide network of offices: Atlanta, Boston, Chicago, Cleveland, Dallas, Houston, Los Angeles, New York, San Francisco, Seattle and Washington, D.C. Mail the coupon with your business card attached or call the Invest in Britain Bureau at (212) 421-1213.



My company is considering Europe as a location in which to:  
Start up a new facility  Extend an existing facility  Other   
I'd like a personal Briefing on Britain  I'd like Briefing material   
My business card is attached

Mail to: Invest in Britain Bureau, British Consulate-General,  
845 Third Avenue, New York, NY 10022. Or call (212) 421-1213

BC 9289

© 1989 Invest in Britain Bureau

# GENI

## 1988 HIGHLIGHTS

(000 US-\$) *	1988	1987
Premiums written	3,825,780	3,391,423
Premiums ceded	— 531,084	— 455,534
Net premiums	3,294,696	2,935,889
Net investment income	706,698	633,826
Technical interest allocated to Life funds	— 364,432	— 330,355
Insurance underwriting result	— 82,476	— 8,709
Sundry income and expenditure	— 34,775	— 7,485
<b>Operating profit</b>	<b>225,015</b>	<b>287,277</b>
Profit on sale of properties and securities	148,524	64,161
Unrealized capital losses on securities	— 48,715	— 84,854
Allocation to reserve for realized capital gains to be reinvested	—	— 5,618
Taxes	— 64,380	— 66,260
<b>Total other items</b>	<b>35,429</b>	<b>— 92,571</b>
<b>Profit for the year</b>	<b>260,444</b>	<b>194,706</b>

\* All of above listed figures have been converted at the rate of exchange of Lire 1,305.77 to the US Dollar.

- Gross premiums written by the Company totalled US\$ 3,825.8m of which US\$ 1,393.8m for Life and US\$ 2,432m for Non-Life.
- Total investments reached US\$ 9,687.4m showing a growth of 26.6%.
- Net investment income totalled US\$ 706.7m showing a growth of 11.5%. The average yield has been 8.3%. Realized capital gains generated from the sale of securities amounted to US\$ 117.6m and from the sale for properties to US\$ 30.9m.
- The year's profit, showing a growth of 33.8% over the previous year, amounted to US\$ 260.4m of which US\$ 137.3m for Life and US\$ 123.1m for Non-Life.
- Profit per share (Dollars) \*

	1988	1987
Profit	0.492	0.367
Dividend	0.253	0.182
Pay-out ratio (per cent)	51	50
- US\$ 112.6m from the year's profit were allocated to the extraordinary reserve.
- The shareholders surplus including the year's profit reached US\$ 2,326.3m showing an increase of US\$ 1,096.5m over the previous year.
- The dividend per share is the equivalent of US\$ 0.253 cents (+10% taking into consideration the free increase of capital, +39.8% on the total dividend).
- The increase of the issued capital in mixed form from 420 billion to 1,060 billion Lire, agreed by the Extraordinary General Meeting held on 28 June 1988, was launched on 19 September 1988 and completed by 5 December 1988.
- During the first half of 1989 2 subsidiaries were established in Milan, Italy: Gefina Commissionaria S.p.A. 100% owned by Gefina S.p.A. and Sodiges S.r.l. Also the Generali Group sold all the shares of Euralliance Paris and reduced its ownership in Vanguard, Sydney, from 100% to 30%.

\* Return per share (in US Dollars) in comparable terms i.e. comparing values to a capital of 1,060 billion Lire.

Head Office in Trieste (Italy)



**GENERALI**  
Assicurazioni Generali

# GENERALI

## 1988 CONSOLIDATED STATEMENT

ASSETS (000 US Dollars) *	1988	1987
Building and farm property	3,726,040	3,450,952
Fixed-interest securities	11,696,817	10,157,795
Shares (including Associated)	3,663,464	2,296,600
Mortgage and policy loans	1,142,560	1,067,140
Deposits with Ceding Companies	494,097	477,176
Bank deposits	926,129	868,933
Accounts receivable and other assets	2,806,620	2,296,028
<b>Total</b>	<b>24,455,727</b>	<b>20,614,624</b>
LIABILITIES (000 US Dollars) *		
Provisions for insurance liabilities	18,554,626	16,195,513
Reinsurance deposits	211,760	222,184
Other liabilities	1,958,426	1,719,517
Minority shareholders interest	340,427	311,976
Shareholders surplus	2,999,518	1,843,401
<b>Profit for the year</b>	<b>390,970</b>	<b>322,033</b>
<b>Total</b>	<b>24,455,727</b>	<b>20,614,624</b>

• This balance consolidates 56 insurance companies operating in some forty markets, (including 7 Europ Assistance companies), 19 financial, 27 property and 3 agricultural companies where Generali directly or indirectly holds more than 50% of the shares.

• Gross premiums amounted to US\$ 8,326.1m (+11.9%), of which US\$ 2,783.3m for Life and US\$ 5,542.8m for Non-Life. The geographical breakdown is as follows: Italy 36.1%; other EEC Countries 41.5%; rest of Europe 19.1%; rest of the world 3.3%.

• Investments total US\$ 21,649.1m (+18.2%).

• Investment income amounts to US\$ 1,661.7m (+11.1%) of which 64.2% is produced by fixed-interest securities, 16.8% property, 7.7% shares, 4.6% bank deposits and 6.7% other investments.

• The provisions for insurance liabilities amount to US\$ 18,554.6m (+14.6%).

• The shareholders surplus amounts to US\$ 3,292.5m and 91.1% belongs to the Parent Company, the minority interest being 8.9%.

• The profit for the year increased by 21.4% to US\$ 391m and originated from:

(000 US Dollars) *	1988	1987
Parent Company's profit	260,443	194,707
Profit of the other Companies	215,589	187,695
Consolidation adjustments	- 37,642	- 23,530
<b>Consolidated profit</b>	<b>438,390</b>	<b>358,872</b>
Minority interest	- 47,420	- 36,839
<b>Profit for the year</b>	<b>390,970</b>	<b>322,033</b>

Parent Company: Assicurazioni Generali



Communications satellites with more than twice the transmitting power of earlier models reduce the size and cost of earth receiving stations. The Ku-band HS 376 satellites, designed and built by Hughes Aircraft Company, transmit with approximately 20 watts per transponder. At this power, earth station antennas as small as four to six feet in diameter, small enough to be mounted on rooftops, walls, or poles, can be used for both transmitting and receiving satellite signals. By comparison, lower power, C-band satellites require antennas six to ten feet in diameter for receiving capability. The high-power satellites are part of Hughes' Very Small Aperture Terminal network, which provides end-to-end satellite communications for data networking and videoconferencing.

A faster, deeper running, more accurate torpedo will counter enemy submarine threats through the year 2000. The Mk-48 Advanced Capability (ADCAP) wire-guided torpedo, under production at Hughes for the U.S. Navy, uses an advanced digital-based active sonar, an inertial measurement unit, a signal processor and two computers to home in on fast moving targets in shallow water, high seas, strong thermal gradients, even under ice. A long, thin communications wire between the torpedo and submarine serves as a real-time relay for changes in the torpedo's attack functions, improving the probability of interception.

A new processor that may one day outperform today's supercomputers uses incoherent light and a unique arrangement of electro-optical modulators. Called PRIMO (programmable, realtime, incoherent, matrix, optical), the processor, being developed by Hughes, passes light signals through successive grid layers, forming a two-dimensional matrix that can modulate the signal. The entire gridwork is addressed with electrical signals fed only to the edges. Thus, the processor can perform complex mathematical functions in parallel, manipulating data at extremely high speeds. The compact device is rugged, requiring no lenses or precise alignments, and is small enough to hold in one hand.

Aerospace technology will be used to test and analyze improved automobile control systems. Hughes will apply the technology, known as real-time hardware-in-the-loop simulation, to the testing of anti-lock braking systems, traction control systems, and active suspension systems being designed for General Motors cars. In real-time hardware-in-the-loop testing, the vehicle's control system "thinks" it is controlling a real car when, in fact, it is connected to a simulator. The simulation helps avoid design problems and is an economic way of obtaining accurate data even before full working models of the systems are built and tested. Real-time hardware-in-the-loop testing was pioneered at Hughes 20 years ago as part of its missile design and development activities.

Engineers and scientists are eligible for approximately 100 Hughes Fellowships awarded for the pursuit of Master's and doctoral studies in Engineering and Science. All Fellows work full time at Hughes during the summer, with Work-Study Fellows working part time during the academic year and Full-Study Fellows attending classes full time. Fellows receive full academic expenses plus stipends for studies at approved universities. Additionally, Hughes offers a two-year, entry-level rotation program that enables qualified BS and MS graduates to diversify their engineering experience. For more information contact the Hughes Corporate Fellowship Office, Dept. S9, C1/B168, P.O. Box 45066, Los Angeles, CA 90045-0066. U.S. citizenship may be required. Equal Opportunity Employer.

For more information write to: P.O. Box 45068, Los Angeles, CA 90045-0068

The logo consists of the word "HUGHES" in a bold, white, sans-serif font, centered within a solid black rectangular box.

Subsidiary of GM Hughes Electronics

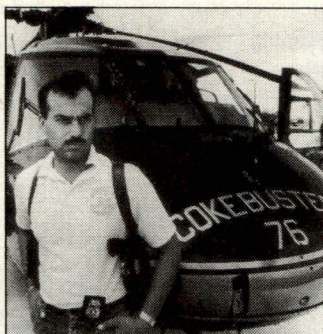
# Mission impossible

WITH two centuries of prosperous and stable democracy behind it, the government of the United States of America has failed to master its national curse of drugs and drug-financed crime. Colombia, a poor apprentice democracy with a horrendous history of violence, has better excuses for its more abject failure. Yet both, in their different ways, are failing for the same reason: what they are trying to do is incapable of success. Repression, however vigorous, cannot win the war against drugs. It is time to try a better way.

Nobody can accuse the Colombian government of faint-heartedness. For most of last month drug dealers were murdering yet more of their arch-enemies, the country's honest judges, policemen and political hopefuls. President Virgilio Barco deployed his powers under the 30-year-old state of emergency to order the arbitrary arrest of 11,000 people, the sequestration of millions of dollars' worth of property, and the extradition without due process of suspects to face trial in the United States. But the big birds, alerted by their corrupted informers in the government services, had flown.

Most of those captured, and most of the seized property, will be released for lack of proof of their guilty associations. Of the 89 people whose extradition the United States most pressingly seeks, only one mere book-keeper awaits the flight northwards. The big traders ordered their henchmen to bomb some banks and government buildings, then slipped across the borders to well prepared retreats and to the Panamanian bank-branches where their money sits secure. Cocaine traders are the world's richest businessmen. Out of their tax-free profits they outspend, outnumber and outgun the law-enforcement powers of poor states, and dent the civil peace and dignity of the world's richest nation too.

President Bush has responded promptly to Mr Barco's bravery, digging into the Pentagon's reserves to send helicopters, small-arms and other weapons. This support was unusually swift and well calculated (and delivered without pious advice); it was followed by promises of more generous economic aid. Attacking foreign drug-suppliers fits well with the new domestic policy that the president and his "drugs tsar", Mr William Bennett, are soon to announce. Americans want a response to the inter-gang shoot-outs in their cities and the wholesale poisoning of young men, women and unborn children. The new offensive promises to be more comprehensive and much more expensive than the rag-tag skirmishes that have preceded it. But it stands little more chance of success than Mr Barco's more desperate endeavour. To understand



why, Americans need only look back at their own country's not-too-distant history.

From 1920 until 1933, American citizens were forbidden to buy or sell their favourite dangerous drug, alcohol. The beer-trucks and the whiskey-schooners kept on coming, creating what were then the most profitable criminal organisations in the world. Now mankind has developed the appetite for yet more powerful drugs, and subjected them to a wider and equally fruitless ban.

Drugs are bad for people. They should not want them—legal alcohol and tobacco, illegal heroin, cocaine, marijuana, or cheap and risky "designer" substitutes dreamt up by artful chemists. Yet demand creates supply, despite the panoply of international conventions and national laws whose main effect is to create still vaster profits for the traders. The drug exporters of Latin America—and of Lebanon, Pakistan, the Burma-Thailand golden triangle and the rest—buy up or terrorise governments, and defy even so-far-un-corrupted regimes, just as North America's mafias, yard-crowds and cartels defy the will of Washington.

## Prohibition does not work

As long as people spend money for a thrill, prohibition cannot work. It turns an issue of personal choice and health into a crisis of criminality. Governments protect drinkers by quality controls, taxes and licensing that divert demand away from the most destructive forms of booze. For cigarette smokers, governments insist on health warnings. To protect people against damage from bad food or therapeutic drugs, they test and measure the products' effects. Illegal drugs they merely outlaw and, while failing to enforce the outlawry, forgo the power to regulate the trade.

Prohibition, and its inevitable failure, make a bad business more criminal, more profitable and more dangerous to its customers than it need be (see pages 21-24). Lifting the ban, and replacing it with detailed regulation, might certainly expose more people to risky experiments with drugs. That danger is real—even if experience shows that relatively few people are foolish enough to go beyond experiments.

But prohibition's failure is more dangerous yet, both for individual drug-takers and for societies corrupted, subverted and terrorised by the drug gangs. The trade is banned by national laws and international conventions. Repeal them, replace them by control, taxation and discouragement. Until that is done, the slaughter in the United States, and the destruction of Colombia, will continue. Europe's turn is next.

# The tough in Tehran



## Getting the measure of Rafsanjani

HE DID it, and he did it more swiftly, more neatly and more comprehensively than anybody had expected. Iran's brand-new President Rafsanjani wanted a new cabinet (12 new men out of 22) to carry out the new policies he has in mind. A majority of Iran's parliament, the body which provides one of the few checks on the country's newly strengthened presidency, said it did not want him to drop the fiercely fundamentalist home minister, Mr Ali Akbar Mohtashemi. The new president put off the parliamentary vote for a week, during which he presumably used his practised techniques of persuasion and intimidation. When the debate began he was ingratiating (Mr Mohtashemi was "one of my closest friends") but unyielding: he wanted his new cabinet, complete, and no Mr Mohtashemi. On Tuesday he got his way, name by name, from a suddenly forelock-tugging parliament.

Forget those abused words "moderate" and "pragmatist", the lazy mind's way of avoiding precision. President Rafsanjani, who beat the opposition so tidily within a fortnight of taking office, has the look of a precise man. Everyone knows the dangers of guessing what will happen next in Iran. Its cleric-politicians are still capable of saying, for tactical reasons, the exact opposite of what they mean. Even so, President Rafsanjani seems clearly different from the purist zealots he has just outmanoeuvred. The West needs to understand what the difference is, and what it is not.

### For the revolution's sake, with footnotes

President Rafsanjani is not pro-western, and he is not a closet secularist. He will pursue the interests of his Iran, which is the Iran created by the mullah-led 1979 revolution against the Shah. He will employ familiar techniques: ambiguity, evasion, the use of bargaining counters (such as hostages) that would shame most other governments. In particular, though he is

increasing his leverage over the hostage-holders in Lebanon, he will not pull the lever unless he reckons Iran will get good things from the West—money and technology—once the hostages are out.

Nevertheless, he is a change from the past ten years, because his idea of Iran's interests is markedly different from that of his predecessors. Like other revolutionaries when the fervour starts to fade, he wants to spend more time on consolidating what has been done at home, less on spreading the revolution abroad. He understands that, in a time of consolidation, exaltation and exhortation are no longer enough to enlist people's energies: more humdrum, earthly incentives are needed. To this end he has to get Iran's economy working better. This means employing more men with workaday talents, fewer with gleaming eyes. It means making sure the war with Iraq does not start again. It also means doing business with countries that can help the rebuilding of Iran's economy, Satanic though they still look to the gleaming eyes. That this is Mr Rafsanjani's aim is not speculation: he said much of it to Iran's parliament on August 17th.

To understand President Rafsanjani, look at President Gorbachev in Moscow and Acting President de Klerk in South Africa. All three recognise that the system they took over cannot be left as it is, because in one way or another it is heading for collapse. None has yet dared to propose system-smashing changes. Yet all face opposition from ideologues who are against any sort of change—Mr de Klerk most visibly (because South African politics allows dissent, for whites), Mr Gorbachev more murkily (because Soviet politics does not allow much of it, even for communists). On this week's evidence, Mr Rafsanjani is doing better for his end than either of the others. The battle in Iran is far from over, but the West should take note of this formidable operator's first success.

# Sure-footed Bush

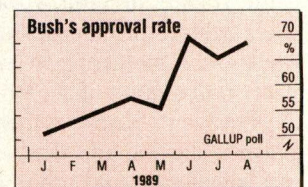
## After a good and popular start, there is room to be bold

HE HAS played baseball, jogged incessantly, scoured the sea for blue-fish. Now, as Labour Day looms, George Bush must forsake the serious business of sweaty holidays for the cooler task of leading America. When he returns to the White House, the opinion polls will be telling him that he is more popular than any of his predecessors were at this stage in the job. He will also know, after last year's election campaign, that opinion-poll success can fade as quickly as the green maple leaves in Maine.

The most notable feature of Mr Bush's seven months as

president has been his ability to stay out of trouble. This is a more substantial skill than the Teflon quality that marked Ronald Reagan's presidency. Mr Reagan often got himself into trouble, by misquotation or by muddle, but almost always managed to laugh off any blame: barmy followed by blarney. Mr Bush has to work much harder to avoid barmy, because he has none of his predecessor's televisual charm and his attempted one-liners usually fall flat.

In the avoidance of barmy, though, Mr Bush has done well. On foreign affairs in particular, he has shown the sure-



ness of touch that his CV promised: 15 years close to the heart of American foreign policy have given him a sense of which levers to pull and how hard. He used this sense to great effect over the hostages last month. No issue has a greater capacity to make the mighty seem feeble, yet Mr Bush managed to minimise the spilling of American blood, shun (as far as one can tell) any shameful bartering with terrorists, and emerge still looking like the head of the most powerful nation on earth. Sad to say, he will almost certainly face similar tests again. It is reassuring to know that he has managed one high score already.

The same mixture of diplomacy and firmness has allowed Mr Bush to extricate America from Nicaragua. He may have shared Mr Reagan's visceral support for the contra rebels, but that became more of a cause than a policy once it was clear he could not persuade Congress to help them. It would have been easy for the last dregs from Mr Reagan's glass to sour America's palate as it started to consider a new approach on Nicaragua. Mr Bush has stopped that happening.

### Broke and bogged down

The caveats about Mr Bush's presidency are less to do with managerial tactics than with his strategy for the longer term. Remember how he promised to be the "education president", a long-term goal if ever there was one. Yet when he came to present his first budget, the small print showed that he was proposing to spend less money in real terms than Mr Reagan had planned. And when Mr Bush flew into Poland, and thus into history-in-the-making, the leader of the world's democracies was able to promise his latest converts only \$119m in aid spread over several years.

In neither case is the parsimony automatically a cause for criticism. Curing America's educational inadequacies will need a change in structure, approach and morale at least as

much as more dollars. Poles will never follow through to full pluralism, both economic and political, if outsiders smother them with banknotes. But Mr Bush's tight-fistedness did not come across as a central part of a wider philosophy about government. On education and Poland, he offered so little because he could afford no more.

That goes to the heart of doubts over the Bush presidency. He has inherited a budgetary position that is unenviable: almost \$3 trillion of federal debt, deficits stretching ahead for ever, both houses of Congress in the hands of spending-minded Democrats. Yet his response to this predicament consists almost entirely of repeating the mantras of his predecessor: no tax increases, no cuts in old-age pensions, a big defence budget. These are precisely the principles that turned the budget red in the first place.

The only way President Bush can escape this bind is by offering his own vision of the future, and then asking Americans to take the tough decisions necessary to realise it. A kinder, gentler America would mean fewer tax breaks for the well-off. An America concerned about the environment and posterity would choose to pay as much tax on a gallon of petrol as motorists in other rich countries do. An America secure in its ideological triumph over communism would decide to scrap one whole new weapons programme (such as the B2 bomber) from its defence budget.

So far Mr Bush has done none of these things, nor even hinted that he might. Nor will he ever do them, as long as he sees individual fiscal proposals as just different forms of tinkering with what is still a Reagan budget. But if he has a Bush vision, then a Bush budget will follow—and both would be a lot more sellable than he now seems to think. He has earned his popularity by being competent, intelligent, likeable. Now he must use it, to win the bigger adjectives that presidents have to play for.

## After Voyager

### Awe-inspiring science needs worldwide co-operation

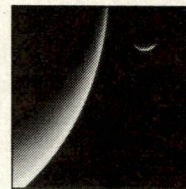
**B**Y BRINGING the world down to the scale of the human mind, science makes man the measure of more and more things. Few achievements demonstrate this more clearly than *Voyager's* exploration of the solar system (see page 79). The century has seen a string of such achievements. The atom, the planets, the stars themselves are now within man's measure. The essence of matter and the moment of creation are far from understood; but they are no longer imponderables. Nor are the advances limited to physics. Biology has pursued the essence of life down to individual molecules in one direction, to the study of whole ecosystems in the other.

This increase in the scope of inquiry has been matched by an increase in the size and the cost of science. When the world was made of earth, fire, air and water, individuals could afford to do science (such as it was). Gradually, the need for money led scientists to learned societies, universities and eventually governments. The technology required to bring news from

the frontiers to the scientist's desk has become fearsomely large as the frontiers have drawn farther away. Some 3,000 people coaxed the *Voyagers* through their years of travel. Hundreds of physicists use 1,000-tonne detectors for particles made in machines measured in miles and millions.

Such projects stretch the limits of single governments; even when they can be afforded, they distort research budgets. They make sense only if they are done internationally, the costs are shared and wasteful duplication is avoided. That is how an ideal world would organise its science. In an imperfect world, governments are not always convinced by international science. They crave scientific superiority as a matter of national pride. But it is foolish to think that achievements in pure science should be a matter of national pride, except in so far as a nation feels pride in serving humanity as a whole.

One advantage of international science is that it can make governments look at their science budgets in the right spirit:



in terms of what they are willing to spend in order to enrich human understanding. Competition does play a valuable role in science: its practitioners thrive on it, and the spice of conflict adds zest to ideas that might otherwise seem dry. But sometimes the savings from co-operation outweigh the benefits of competition.

Consider particle physics, which is both fascinating and notoriously spendthrift. Both America and Europe are planning huge, multi-billion-dollar particle colliders for the 1990s. After the progress that has already been made, building two such machines to get at one piece of physics would be a horrible waste of money. But America's attitude to internationalism is ambivalent. For decades world-scale science was the province of the American taxpayer, and the rest of the world could sit back and take pride in achievements like *Voyager* without paying a penny. The world's biggest debtor should now be seeking ways to share the burden.

Yet no sooner has Vice-President Dan Quayle (as chairman of America's National Space Council) spoken of co-operation than he blows it in the next breath by reasserting his country's primacy in "America's frontier". Nobody would deny America a role in space as *primus inter pares*, at least in the West. But a space programme in which it does everything, with its allies chipping in with superfluous embellishments,

would not best serve space science. The American record, despite its pinnacles and bursts of excellence, does not show the steady progress that space science now needs.

The greatest need for world science, though, is in the science of the world. The changes made to the earth's atmosphere by mankind amount to a vast, unplanned experiment in planetary science. Scientists need to uncover the data from this experiment, predict its course, and, where necessary, intervene. The project will include big science, such as new types of satellite that will study the earth from space in greater and more germane detail than ever before. It will also mean local scientists gathering information from every corner of the earth and oceans, which may be less glamorous but is no less needed. In the study of the environment, there is a role for the biggest science and the smallest; it is one of the few fields in which both can show their value equally.

The advantages of such a mission to planet earth go beyond the data it could collect. It would bring together scientists from disciplines that do not normally meet—a good recipe for fertile theorising. Also, when countries collaborate on science, those who come to the party with the least gain the most. If knowledge brings the world to man's measure, then the sharing of that knowledge, and of the advantages that flow from it, should be the measure of man.

## A friendly TUC?

### Britain's trade unions still have a way to go to join the modern world

WHEN the leaders of Britain's trade unions meet in Blackpool next week, some of them will see the watery sun and wonder if it has turned out nice again. There has been a summer of reviving hope. Unions have defeated managements at the BBC, British Rail and London Regional Transport. They have won pay awards well above price inflation from companies like ICI.

Awkwardly, the biggest victories were achieved against weak public-sector managements. Others reflected the tight labour market in much of British industry at this peak of a seven-year boom. There were no successes in areas where competition is hotting up, like the docks. Britain's public sector is shrinking, and unemployment will soon be rising again, partly because of this summer's wage inflation. As and if their apparent successes turn again into the seed for their future defeats, the real problem for the unions will emerge as before: to decide what it is they are there to do.

The worst features of the unions' terrible 1980s are continuing. Membership of unions affiliated to the Trades Union Congress (TUC) fell from 12.2m in 1979 to 8.7m in 1988. Although total numbers in employment in Britain have been rising since 1983, union membership has kept on falling. In the mainly white-collar, private-sector, especially part-time occupations—which are expected to grow fastest in the next decade—union membership is often startlingly low. On one estimate, which the TUC itself takes seriously, only 5% of Britain's non-manual, part-time employees now belong to a

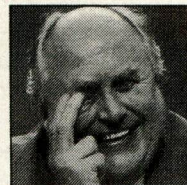
union.

The good news for the Blackpool faithful is that Britain is still far from being a non-unionised country. Even after the years of decline, about 40% of its workers are in unions—more than double the ratio in America. The unionised public sector will continue to shrink, but it is not going to disappear. Large employers of unionised manual labour, like car manufacturers and engineering companies, are not suddenly going to turn themselves into assemblers of components made by non-unionised workers in Thailand. Unions will be a familiar part of the British landscape for many years yet. Their core activity will continue to be to represent members to employers, whether through collective bargaining or the resolution of specific grievances as they arise.

### All Thatcherites now

Although unions will never say this openly, Margaret Thatcher has helped them perform this part of their business better than they used to. By making it difficult to call strikes, and impossible to win them by bullying workers who don't want to strike, the government has forced unions to listen to their members. It was the members who hated being called out to satisfy a shop steward's ego, who saw that inter-union disputes on the same site were daft. The leaders who attract members now are those who sign single-union deals, and commit themselves to binding arbitration.

Some union leaders feel this is not enough. In the 1960s



and 1970s they assumed they could dignify their role by entering into a "partnership" with government. Since 1979 Mrs Thatcher has disabused them, and made it plain that they are no more an estate of the realm than is the Rotary Club. If Mr Neil Kinnock's Labour returns to power, they trust it will again treat them with reverence.

Most leaders of both the party and the unions dislike such talk. Labour says it wants to drop (well, modify) the unions' block-vote at its conference. The wisest unions now see that if they are identified with the actions of an unpopular government, they become even more unpopular themselves, and so does "their" government. An arm's-length embrace now looks the prudent limit of passion between party and unions. If this year's TUC and Labour party conference increased the impression that a future Labour government would kowtow to the unions, that would diminish the prospects of Labour winning the next election.

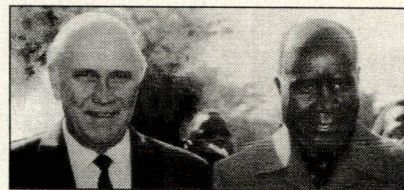
So a lot of union leaders see that they should now concentrate on improving their services to their members, but are

not yet being sufficiently imaginative about what new services to offer. Unions should remember the days when they were just friendly societies. Once, they provided a host of health, welfare and education services for their members. Most of that activity was later gladly handed over to public bodies. But the monolithic, centralised welfare state is breaking down; it is already being attacked from both right and left—and will always be resented by whichever party is having to shoulder the other expensive tasks of government.

Radical unions should now be looking for bits of the welfare state to pick up. Could they run employment exchanges in competition with both government and private firms? Might they start their own City Technology Colleges, competing with the one set up down the road by the local employers? Can they not offer their 40% of the British workforce (and their families) much better terms on credit cards, bulk-buying, holidays? To some union leaders, this would be the ultimate heresy, an admission that we are all capitalists now. It would also be nothing less than the truth.

## The travelling salesman

**F.W. de Klerk had better be as eager to talk to South Africans as he is to their neighbours**



SOMETHING new is happening in South Africa. For the first time since it came to power in 1948, the ruling National party is trying to win support by appealing to flexible, rather than inflexible, white voters, and is basing its appeal on the promise of talking to blacks, not yelling at them. In this unusual campaign lies the possibility of change for the better—and also the possibility of dashed hopes.

All general elections in South Africa are peculiar, if only because they involve all the paraphernalia of democratic elections yet exclude the majority of the country's citizens. The election on September 6th is more peculiar than usual in that the National party's leader, Mr F.W. de Klerk, is doing his most conspicuous campaigning outside the country, courting, it would seem, the support of people who are not South Africans and would not be allowed to vote if they were. Over the past six weeks Mr de Klerk has met the black leaders of Mozambique, Zaire, Zambia and Lesotho, who have greeted him not with the vitriol and denunciations usually meted out to the officers of apartheid but with tolerance and even restrained approval.

Thus fortified, Mr de Klerk is going before the voters as the man who can negotiate South Africa out of its difficulties. Such a tactic is not just a departure for a Nationalist, but a risky one. Time and again his predecessors, faced with right-wing threats much less formidable than that now posed by the Conservative party, have chosen to assemble the ox-wagons in the traditional circle and gather Afrikanerdom inside. From there they have thumbed their noses not only at blacks, Indians, mixed-race Coloureds and the world, none of whose votes count in the whites-only house of Parliament that dominates South Africa, but at ballot-casting English-speakers too. They have generally been rewarded with increased majorities.

Mr de Klerk, by contrast, appears to be writing off the ultra-racist right. Those protesters smarting under the sting of policemen's whips, rubbing tear gas from their eyes or picking shot-gun pellets from their sides may not believe that Mr de Klerk stands for anything but a variation on a familiar theme. Yet de Klerk-the-traveller may be more significant than de Klerk-the-acting-president, whose job it is for the moment to uphold apartheid. By turning his back on the ideological racists, he is wooing the English-speaking vote and thus changing the nature of the National party, albeit from a tribal redoubt (of Afrikaners) into a racial one (of whites in general)—but any broadening must be welcome. By casting himself as a negotiator, he is evidently prepared to be more conciliatory than was his predecessor, Mr P.W. Botha, at least towards the end of the Botha presidency.

### The logic of talking

Mr de Klerk's sincerity should not be in doubt: if he did not mean to carry through his pledge to negotiate, there would be no point in making it, for the pledge alone brings with it the risk of losing his job. But it is still not clear that Mr de Klerk appreciates whom he must negotiate with. Talks with neighbouring leaders are all very well; indeed, they may play a vital part in ending regional wars, such as Angola's, which now threatens to get going again. But the only talks that can end South Africa's internal war, and thus its isolation in the world, are with the leaders of its own black majority. In this sense Mr Botha was right when he declared in his resignation speech on August 14th that Mr de Klerk's talks with Zambia's President Kaunda would be tantamount to talks with the banned African National Congress.

Logic was with Mr Botha; foresight may not have been. It

is possible that, if his Nationalists win the election, Mr de Klerk will interpret his victory more as a mandate for diplomacy abroad than for reform at home.

And Mr de Klerk may well prove to be a skilful diplomat. In appearance and manner, he is benign, certainly more benign than Mr Botha could ever manage to be. In argument and conduct, he is adroit: he owes his position as party leader

to his skills as a tactician. Nothing in his career suggests that he is a man of strong convictions; everything suggests he is one of instinct and calculation. The hope must be that, if his instincts do not lead him to talk to South Africa's disfranchised black leaders, then his calculations will. Otherwise South Africa's next election will revert to type, amid fear, bloodshed and right-wing bogeys.

## A dispute about disputes

**American stockbrokers want their customers to settle all disputes through arbitration, not the courts. That is as good a reason as any for saying no**

**I**F YOU listen to American stockbrokers, compulsory arbitration is the best break their customers have had since Mayday 1975 when fixed commission rates on share transactions were abolished. They cite a study the New York Stock Exchange commissioned after the Supreme Court gave a ruling the NYSE liked: the court said nearly all securities cases by customers against brokers should go not to court but to arbitration if the customer had signed a standard arbitration clause. The NYSE's study says that arbitration is quicker and cheaper than litigation and that plaintiffs are usually awarded larger sums. Customers are right to suspect they are being handed the wrong end of the lollipop.

The NYSE document that brokers wave so enthusiastically is a survey rather than a study. Some of its statistics are hardly worth the cheap paper they are written on. Deloitte, Haskins & Sells, the accountancy firm that conducted it, cautioned in a covering letter that the survey was "not subjected to procedures in accordance with generally accepted auditing standards". Interested parties—six brokerage houses—supplied the records which the accountancy firm used to compare the results of litigated disputes with arbitrated ones. The firms were not required to choose the same three-month period as a base. Nor were their files subject to an audit check.

The sceptics include the Securities and Exchange Commission, even though in recent years the SEC has lost its anti-establishment instincts. The old give 'em hell regulatory style of Mr Manny Cohen and Mr Stanley Sporkin is out of fashion. The present agency is able to swallow Deloitte's finding that arbitrated cases are resolved more quickly than litigated ones (an average of 434 days compared with 599 days) and at a lower legal cost (\$8,000 compared with \$20,000). But even today's tamer SEC chokes over the NYSE's claim that the plaintiffs recover more as a percentage of their total claims in arbitration (19.7%) than they do in litigation (2.6%). It can find no "empirical support" for that conclusion.

### Give shareholders an even break

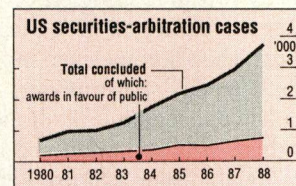
Investors would be less suspicious of arbitration if brokerage houses were not so determined to frog-march them into it. Arbitration has a long history as a way of settling trade disputes between businesses that expect to have a continuing, profitable relationship: for example, a car manufacturer and a car dealer. Hundreds of retired judges, in Britain as well as America, pay for their yachts with the fees yielded from set-

tling these disputes, though in American securities cases arbitrators' fees are low. As Professor Richard Shell of the Wharton School has noted, businessmen have a common interest in signing a clause that requires them to send their periodic commercial disagreements to private, mutually selected experts rather than to judges and juries. Brokerage houses and their customers are different.

Typically, the brokerage house holds all the cards. It has deeper pockets than the aggrieved investor. It is more expert. It possesses the documents the investor needs to prove his case—documents that are often hard to obtain during the discovery process. To weight the odds further, brokerage houses are not only insisting that customers, especially those opening margin or option accounts, sign an arbitration clause. They also insist that the clause commits their customers to the arbitration procedures of a securities-industry body such as the NYSE or the National Association of Securities Dealers. This is contrary to NYSE policy. In a letter to its member organisations on June 1st, the Big Board "encouraged" them to give their customers the right to choose the American Arbitration Association to resolve disputes.

By ignoring this advice, brokerage houses are increasing the chances of Congress passing legislation to keep arbitration voluntary. This is already the policy of the Commodity Futures Trading Commission, whose main job is regulating the Chicago markets. Customers of commodity brokers have the right to refuse to sign an arbitration clause and so retain their freedom to take to court any dispute that arises. A march to court does serve to enrich lawyers. But if arbitration is as wonderful for the customers as brokers say it is, why not permit rather than require them to go for it?

Suspensions would also be reduced if arbitration clauses allowed customers to choose the arbitrating body. The arbitration procedures of the stock exchanges were originally intended primarily to settle clubby disputes between members. The NYSE is undoubtedly sincere when it claims its arbitration today is as fair as anybody's, but its members' customers should have a guaranteed right to go elsewhere if they prefer. An appearance of neutrality is sometimes as crucial as neutrality itself. The American Arbitration Association gives parties to a dispute longer lists of arbitrators to choose from and gives each of them a right to cross out lots of names. More important, it is independent of the securities industry.



# DRUGS

## It doesn't have to be like this

**Colombia is fighting a war against drugs. America is losing one. The rest of the world will lose too, if its weapon is prohibition. There are better ways**

TOWARDS the end of 1988 a kilogramme of cocaine fetched about \$12,000 in New York. A hard bargainer could get it for \$8,000. Stockists were unloading and the price was falling fast. The import, sale and possession of cocaine are illegal in the United States, yet there was a glut of the stuff.

Back in 1980, one-kilogramme lots of cocaine hydrochloride cost about \$60,000. In those days it was a foolish fashion for bankers and bond-salesmen, who sniffed it through rolled \$100 bills after dinner while boasting of their good connections. Now it is sold adulterated at \$10 or less for a cheap ten-minute thrill amid murder and mayhem in America's slums. Even that price still brings huge profits: a gramme makes four doses, so the kilogramme bought for \$12,000 can fetch \$40,000 on the street.

The drugs trade is a fine specimen of unrestricted competition, which efficiently brings down prices and pushes up consumption. Governments refuse to limit the trade by regulation, taxation and discouragement. Instead, by national laws and international conventions, they try to prohibit it. In 1980 the federal government of the United States spent just under \$1 billion trying to keep heroin, cocaine and marijuana out of its domestic market. By 1988 it was spending almost \$4 billion. Yet the retail price of drugs dropped even faster than the cost of policing rose. As prohibition failed, the volume of imports soared.

### Funny figures

No one knows the arithmetic of the drugs trade. Retail prices can be fairly easily established by asking around in any American city. Since drugs traders do not declare their dealings to the customs or the tax-men, other figures on the trade are bogus. The American figures are especially odd, since 11 federal agencies (police, customs, coast-guard, Drug Enforcement Agency and so on), plus uncounted state bodies of one sort and another, competitively claim that the drugs problem is very serious, so give them more money and they can solve it. The first statement is true, the second false: either



way the "statistics" get swollen.

For example, a subcommittee of the United States Senate recently reckoned the global trade in banned drugs at \$500 billion a year—an estimate credited to another estimate, in *Fortune* magazine. Of that, said the subcommittee, about \$300 billion was earned in the United States, and about one-third of American drugs sales are of cocaine. So, hey presto, the American cocaine market is worth \$100 billion a year, which, at \$40,000 a kilo retail, implies imports of 2,500 tonnes of cocaine.

At a fair guess, it costs about \$200 to produce one kilogramme. Transport from Colombia to North America costs about the same. Add a crude \$1,000 for distribution expenses, including bribes and enforcement. Compare these costs even with the low 1988 street price, and it appears that along the distribution chain total American cocaine sales bring dealers tax-free profits of more than \$95 billion.

Of such heroic arithmetic are scare-stories made. Yet—however uncertain the figures—cocaine is indeed clearly the most profitable article of trade in the world. In response to profitable American sales in the late 1970s, third-world producers planted extra acres, fitted out new laboratories and recruited better-armed sales forces. By the late 1980s deliveries had soared. To unload them, the middlemen had to cut their prices. They went down-market, hiring

gangs to compete for distribution monopolies in poor areas,

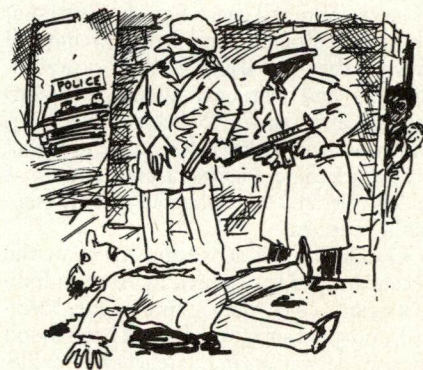
By early 1989 the slums of the District of Columbia, seat of the most powerful government in the world, saw—or rather, took care not to see—about ten murders a week. Half were associated with cocaine trafficking. Politicians and journalists could hear the shooting. It hugely reinforced the anti-drug propaganda that was already fashionable with everybody from First Ladies to the musicians selling rap and reggae and salsa tapes to the ghettos. The war on drugs flooded the media. The drugs continued flooding the slums of Washington.

### Now for Europe

American demand is probably falling (though not the murder rate: the fight for the remaining trade could well become still more vicious). So forward-looking drugs merchants are investing their profits in new markets. Japan's is potentially huge, and developing fast. The

richest is Western Europe, even ahead of 1992. In drugs as in other leisure products, Europe's diverse countries have different tastes and offer different market opportunities. Spain's links of trade and culture with producing countries in Latin America make it a natural market for the Colombian cocaine industry. Italy is the native land of the mafia, which is losing its old grip on the North American drugs trade; heroin, the mafia speciality, is already rife in Italy, where it killed more than 800 people in 1988, half as many as in the United States.

In northern Europe, Chinese, Pakistani and West Indian gangs (not to mention the natives) have long competed for control of illicit markets. Imports are rising, prices dropping. European governments these days are spending much more on anti-drugs



law enforcement than they used to. Far higher is the price paid by the customers who die of overdoses or poisonous adulterants, by policemen, by ordinary citizens whose lives are intermittently put at risk and whose civil liberties sometimes curtailed in the losing battle to prohibit drugs.

**Legal and illegal**

Almost everybody takes some kind of stimulating drug. In 1988 the average Briton aged over 18 spent \$50 on tea and coffee, \$325 on tobacco and \$750 on alcoholic drinks. These legitimate products please, or invigorate, or calm, or console; they change the taker's state of mind. So do various stimulants and tranquillisers that may (depending on local law) be available only on prescription. All are addictive, in varying degrees.

The demand for mind-changing drugs is irresistible, although their effects are mysterious. Alcohol, for instance, is classed as a depressant, but makes most drinkers happier. Alcohol abuse has been recorded ever since Noah, safe after his Flood, "drank of the wine, and was drunken", with awful consequences for race relations.

Cigarettes kill smokers by the million. Alcohol wrecks people's lives and livers, ruins families, helps cause most road accidents and most violent crimes in most western countries. Powerful advertising promotes its consumption, mild government campaigns (backed by discriminatory taxes) seek to diminish it. But outside the Muslim countries that forbid alcohol on religious grounds, nobody seriously suggests prohibition. That was tried in America between 1920 and 1933, and it failed.

Illegal drugs do much the same things as legal ones but more so; the difference that matters is legislative, not pharmacological. The law copes clumsily with "designer" drugs, invented by chemists and cheaply made in home laboratories. But the main traded products are easier targets, the traditional drugs derived from tropical plants:

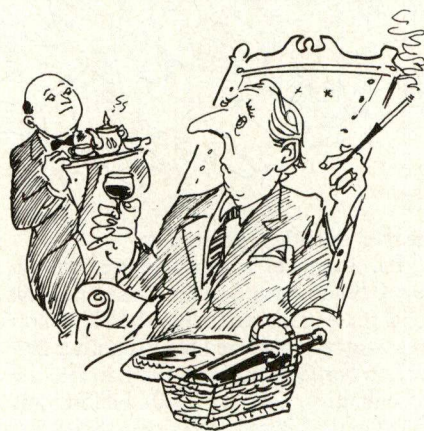
● **Marijuana** (ganja, bhang, dope) is made from the leaves and seeds of Indian hemp; its concentrated (and so more easily smuggled) form is hashish. It may be smoked, drunk as an infusion or baked in cakes. It produces euphoria, disorientation, a heightened sense of rhythm and music and a lack of motivation and aggression. It has no important medical use, and people do not feel ill when they stop using it. Many American students find marijuana milder, easier to conceal and harder to detect than beer, which is equally illegal for most people of college age there. Marijuana consumption is widely tolerated even where its sale and supply are banned.

● **Cocaine** is the active ingredient of the coca plant, habitually used by Andean Indians against cold, hunger and fatigue. Medically, no good substitute has yet been found for coca derivatives in the relief of pain. Ille-

gally, cocaine crystals are mixed with a neutral (sometimes harmful) powder and sniffed, smoked or sometimes dangerously injected. One eighth of a gramme in the bloodstream can intoxicate an inexperienced user into hyperactive euphoria. Regular users want more and more to get the same effect. Stopping its use may leave a craving as acute as that which some people feel after they stop smoking cigarettes. Regular use rots the nose and damages the muscles of the heart.

Cheap cocaine may contain traces of the damaging solvents used in extracting it from the original leaves. Tiny volumes of it, mixed with baking soda to make "crack", may be heated to give off hot and harmful intoxicating smoke. Crack is no more or less addictive than cocaine in other forms; but \$10-worth of it can give impoverished youths ten minutes of reckless excitement, during which they do crazy things. They could get the same effect much more cheaply with synthetic amphetamines.

● **Heroin** is a soluble powder derived from



poppies; opium is dried poppy sap, morphine an intermediate derivative, codeine is in every household. The opiates are medically irreplaceable painkillers, which work so powerfully on the central nervous system that stopping their use can cause physical distress as bad as a bad flu.

Prudently used, heroin need do no great physical harm: when doctors in Britain were free to prescribe it, some of them became addicts and still worked well at their jobs for decades. That was stopped because a few addicted doctors thought heroin so wonderful that they prescribed large quantities of it for others, profitably spreading their own addiction.

Most healthy people dislike heroin, but it can enslave the unhappy or the psychologically disturbed. As many as one in four of those who regularly use it feel ill if they do not take it, and will lie, cheat and steal for their supply; these are the addicts. Their craving may be chemically assuaged by synthetic methadone. Many doctors and prison officials think heroin addiction mainly a

symptom of psychological disturbance, and try to treat it much as they treat alcoholism, gambling and other compulsions. But doctors are reluctant to treat addicts who, by admitting their addiction, are also confessing to a crime.

**Addicted societies**

Drug abuse may accompany social as well as personal disorder. Respectable citizens were scared by alcohol in England in the 1740s (and in Russia always), by opium in nineteenth-century China, by hashish in Egypt in the 1920s. North Europeans tend to drink rarely but in heavy binges, so Nordic countries tax strong drink hard. Southerners drink as much but more slowly, so Italians do not seem drunk and have weak anti-alcohol laws, but still damage their livers.

American politicians became convinced during the first world war that drink was wrecking the nation. In 1919 they amended the federal constitution to prohibit all dealings in alcohol, except for medical purposes. Drunkenness dropped, but a lot of people insisted on their beer or whisky. Some brewed the stuff at home, and brewed hangovers with it. Others bought certified liquor from Scotland via Canada, or from France via Cuba. The shippers, labelled as criminals, behaved as such. They "protected" truck-drivers and bar-owners, shot rivals, paid off local politicians and policemen.

The federal authorities caught the richest bootleggers mainly by tricks such as excessive income-tax assessments. As soon as they trapped one, another sprang up to satisfy the profitable demand. By 1933 the federal government gave up and legalised drinking again. The bootleggers, losing their tax-free profits, diversified into other illegal services such as gambling and abortion. As these too began to be made legal, so less profitable, the gangs went back to smuggling, and began with marijuana.

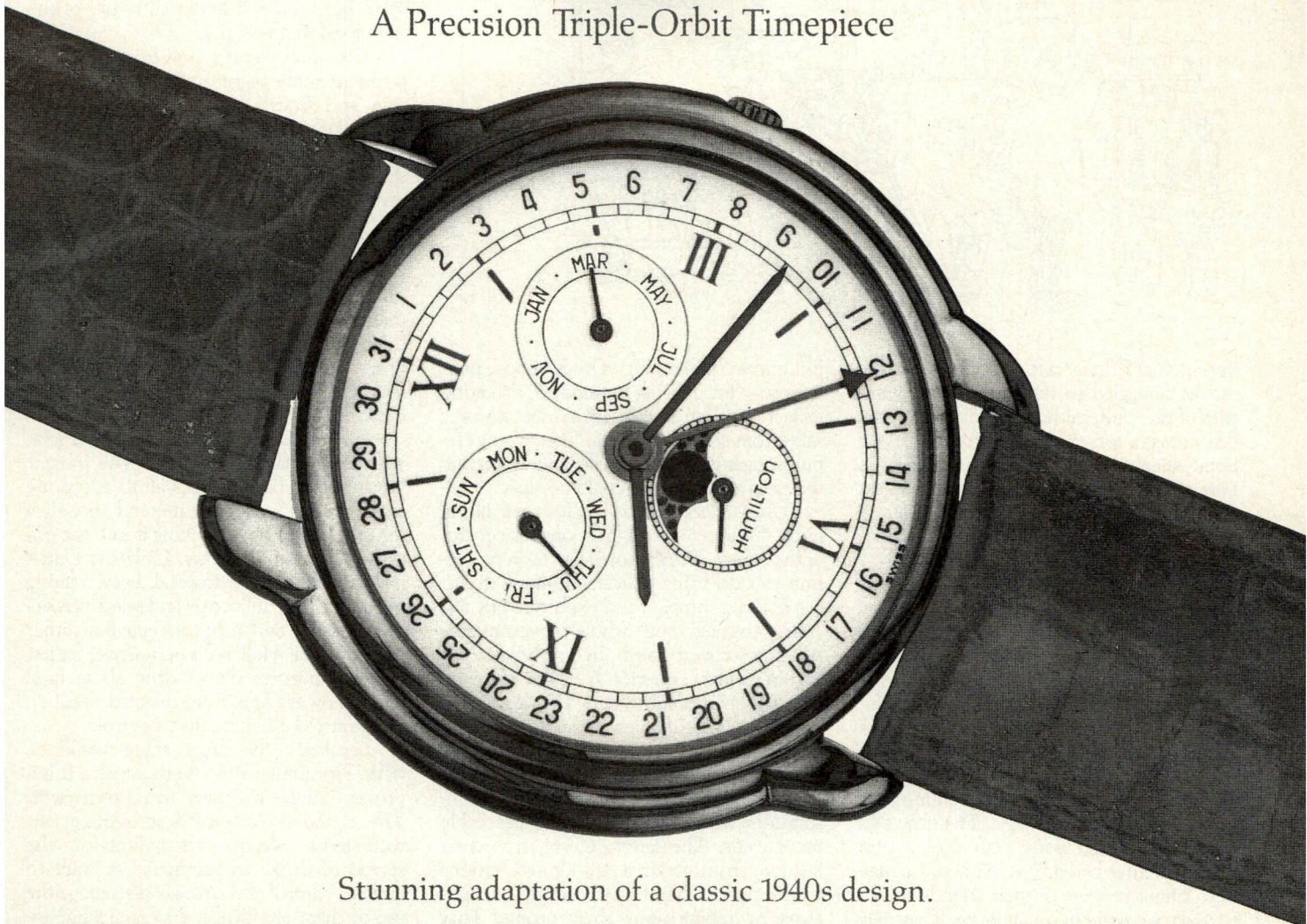
The Caribbean entrepôts began to relive the bootlegging days that Hemingway recorded. Then in the 1960s the region acquired more small, poor, bribable governments. The marijuana transport and retail networks too made progress, brutally, by buy-outs and shoot-outs, into cocaine, which meant higher profits from smaller volumes easier to conceal and transport.

Britain's experience has been longer. In the eighteenth century cheap gin ravaged its crowded, already industrialising cities. Moralists were appalled at the degradation depicted by Hogarth, capitalists found that drink made their workers unproductive. So Parliament began to control the trade. Retail sales were limited to outlets supervised by local magistrates. The quality of spirits was stiffly controlled, to cut out poisonous adulterants. Taxes made strong drink much costlier than relatively harmless beer.

The system remains in place, modified (albeit too slowly) to match the changing

# HAMILTON MOON-PHASE

A Precision Triple-Orbit Timepiece

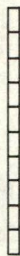


Stunning adaptation of a classic 1940s design.

A prestigious timepiece for people whose time is precious...the Hamilton Moon-Phase is brilliantly updated for the demanding style of the 1980s.

Its intricate triple-orbit design makes a striking fashion statement in any setting and is the height of elegance for every occasion.

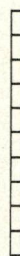
The precision analog displays track the month, day, date, hour, minute and second, as well as the phases of the moon. All kept to pin-



point accuracy by a state-of-the-art Swiss quartz movement.

Each Hamilton Moon-Phase is richly finished with 5 microns of 18k gold and fitted with a genuine crocodile wrist band.

Flawlessly built *by hand* by the craftsmen of the world famous Hamilton Watch Company, the Moon-Phase is offered to you for just \$295,\* payable in convenient monthly installments.



As an added luxury, your Hamilton Moon-Phase will be engraved on the back with up to three initials of your choice, at no additional charge.

Order now to avoid disappointment. If you are not completely delighted, return your watch in original condition within 30 days for a full refund. Phone orders shipped within 5-7 business days.

\*Plus \$3.50 shipping/handling.

© 1989 MBI

**Call Toll-Free: 1-800-367-4534**

**Hamilton Classics**  
47 Richards Avenue  
Norwalk, Conn. 06857

446-8378

**For Fastest Service Call Toll-Free: 1-800-367-4534**

Please send me \_\_\_\_\_ Hamilton MOON-PHASE watch(es).

Initials to be engraved on back:

Charge each of 8 installments of \$37.31 each to my credit card:

MasterCard  VISA  Diners Club  American Express

Credit Card # \_\_\_\_\_

Expiration Date \_\_\_\_\_

Name \_\_\_\_\_

PLEASE PRINT CLEARLY

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Signature \_\_\_\_\_

(All orders subject to acceptance)

I prefer not to use a credit card and will pay by check. Enclosed is my deposit of \$99.50\* for each watch. I will pay the balance as billed in four monthly installments of \$49.75 each.

\*Connecticut residents add 8% sales tax. Tennessee residents add 7 $\frac{3}{4}$ % sales tax.



times. Now Britain certifies Scotch whisky that is smuggled to the prohibition countries of the Gulf, as though Colombia certified cocaine for export to New York. At home, alcohol's ravages increase when, as now, the government fails to keep taxes on drink ahead of inflation. Drinking remains a problem for private health and public safety. But the drinks trade is crime-free.

**Crime-creating prohibition**

Prohibition creates crime, and so gives rise to fiercer dangers than the medical and social ones it is intended to avert. True, the prospect of time in jail must prevent prudent people from ever trying drugs at all. But it is not the prudent who need protection.

The young and the foolish are exposed to special risks when several different drugs are classed together as illegal. The state says marijuana is much worse than alcohol, and must therefore be banned, with stiff penalties. Young people see their friends smoke it, and try it without much harm. They may therefore believe the whole law is an ass and imagine that heroin, subject to similar bans, is similarly harmless, which it is not.

Governments compel producers to indicate the alcohol content—and, for wine at least, the quality—of their drinks. Banned drugs are simply banned; their quality and purity depend on no more than the seller's good faith, which may not be great. Cheap crack, or the even cheaper cocaine sold as *basuco*, is often poisonously tainted by ethylene or even petrol used as a solvent in its making. That can kill. In southern Italy the mafia sells heroin at 10% concentration, in the north at 50%. Southern addicts visit the north and kill themselves with one injection, like a beer-drinker who might unknowingly gulp a pint of whisky.

Governments that ban drugs cannot also tax them; they thus abandon the most effective means of controlling their abuse. Britain's differing tax-rates divert demand from hard spirits to less harmful beer, but not from heroin to marijuana (nor from marijuana to beer, if you think that desirable, which many wouldn't: a joint costs less

in London than a pint). Drugs impose public costs—for policing the trade, for treating its victims (such as the heroin users who get AIDS from shared needles), for warning the public against abuse. Governments decline the revenue that taxes could produce.

Drug-takers steal to pay for their illegal habit. Drug retailers fight it out for control of the streets. Drug wholesalers form protection squads, bribe policemen, tempt politicians. Drug shippers and exporters buy aircraft, arsenals and whole governments. America's covert agents, in South-East Asia and in Central America, have too often exchanged favours with them. The drugs business is the basis of much of the world's petty crime, and of some of the world's largest criminal conspiracies.

Vast untaxed profits amass in the conspirators' hands and trail off into peaceable tax havens. The latest intergovernmental fashion, enshrined in a new United Nations convention, is therefore to beat the conspirators by taking away their profits. That sounds good. But the world is awash with crypto-dollars, avoiding tax or evading exchange-controls; it is impossible to sort the drugs money out from the rest without attacking the banks that big countries protect. So far, the main target of America's prosecuting zeal is a bank owned by Saudis, inspired by Lebanese, managed by Pakistanis and blaming any regrettable misunderstandings on its outpost in Panama.

American politicians are frightened of drugs wars on their streets, and so they should be: they have the most heavily armed urban population in the world. Drugs wars in poorer, less resilient countries terrify their politicians with even better reason. Lebanon is awash with weapons, many of them paid for by the poppy crop whose precious sap keeps the Afghans fighting

too. In Colombia judges and newspaper editors have faced a choice: collaborate and get \$100,000, resist and get a bullet in your son's head. Now it is the authority of the state itself that is at risk.

The ooze of corruption from the illegal trade threatens bigger nations such as Pakistan and Brazil. Hard-working Jamaicans can make money flying fresh flowers to the United States; but smugglers slip ganja into the flower-pots, so the American customs search the flowers for so long that they die.

**Legalise and control**

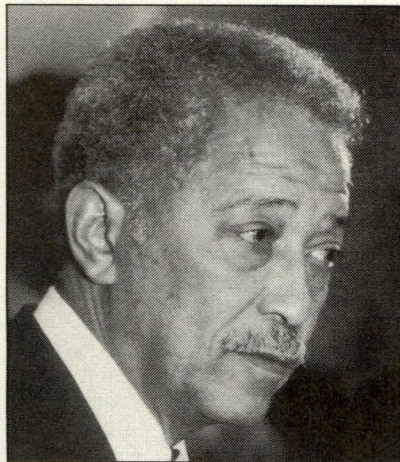
Drugs are dangerous. So is the illegality that surrounds them. In legitimate commerce, their sale controlled, taxed and supervised, their dangers proclaimed on every packet, drugs would poison fewer customers, kill fewer dealers, bribe fewer policemen, raise more public revenue.

For drugs as for alcohol, different societies need different remedies. The present international ban compels all to adopt the same blanket policy: to pretend that they can stop the trade, so forcing it into the evil ways that it now follows. Only the Dutch have had the courage to break away, treating different drugs differently and selectively applying social and medical remedies rather than criminal. Holland is permissive; yet few of its youngsters die of drug abuse (and hardly any get AIDS from infected needles). Drug-related crime is under control.

Legalising the drugs trade would be risky. Prohibition is worse than risky. It is a proven failure, a danger in its own right. *The Economist* advocates its replacement with more effective restrictions on the spread of drugs. In summary, we want to legalise, control and strongly discourage the use of them all. Give it 20 years, while today's drugs squads turn their energies to things that actually do some good like helping little old ladies cross the road.



# AMERICAN SURVEY



New Yorkers yearn to get rid of Koch but are bored with Dinkins (left) and don't warm to Giuliani (right)

## Enough already, but it could be him again

NEW YORK

THEY would like to elect a new mayor this year. Mr Ed Koch has so worn out his welcome in America's biggest city that he is scarcely less disliked than Mr George Steinbrenner, the petulant owner of the slumping New York Yankees. Yet, according to some recent opinion polls, Hizzoner has an even chance of being re-elected to serve an unprecedented fourth four-year term.

It is a Lazarus-like comeback. Three months ago the polls indicated that Mr Koch was highly unlikely to win the Democratic primary on September 12th—and that, even if he did win, he would then be defeated 2-1 by Mr Rudolph Giuliani, the probable Republican candidate, in the general election in November.

It is not that Mr Koch—who used always to demand "How'm I doin'?", but now fears the answer—is doing well. Six out of ten New Yorkers tell pollsters that he has been in office too long. It is rather that, during the summer, New Yorkers have had a chance to take a harder look at Mr Koch's opponents. An increasing number, it seems, are deciding they could do worse than vote again for Mr Koch.

The rest of the country, where Mr Koch would find it hard to be elected dog-catcher, finds this inexplicable. His style is sloppy, streetwise, crude. He engages in vulgar abuse. He chanted "piggy, piggy, piggy" at Mr Donald Trump, a New York property developer, and "It's drugs-money, drugs-money, drugs-money, Rudy" at Mr Giuliani on hearing that the Republican's law firm,

White & Case, counted General Noriega's Panama among its clients.

Against the vulgarity must be set an often self-mocking sense of fun that tickles New Yorkers. Mr Koch has made his opponents in this, as in previous, election campaigns seem earnest, plodding and dull. The bald, paunchy, 64-year-old mayor confides that he wants Mr Arnold Schwarzenegger to star in a movie of his life. He advises New Yorkers to "pick 12 issues, and if you agree with me on 9 out of 12, vote for me. If you agree with me on 12 out of 12, see a psychiatrist."

His Yiddish blarney helps divert attention from his spotty record. The mayor's personal honesty has never been in doubt. Nonetheless political scandals have dogged his administration throughout the past four years. The latest is the disclosure that a "talent bank" that was supposed to bring more blacks, Hispanics and women into city government was more interested in political cronyism than affirmative action.

The 90,000 homeless people in New York ought to cause Mr Koch more political embarrassment than they do. So should the increase in poverty in a city where the rich flaunt their wealth. It has contributed to the huge increase in family violence that led to 13,000 court cases for child neglect and abuse last year, compared with 1,700 in 1984. Poverty amidst plenty, and the despair that accompanies it, contributes to the breakdown of family life. Eight out of ten babies in central Harlem are illegitimate. The city's health officers calculate that New

York has perhaps 200,000 people on heroin and another 200,000 on crack, cocaine and other drugs.

But in the election campaign all these worries have been subsumed into the issue of crime and punishment—or rather "crime 'n drugs". The two have become as inseparable as rock 'n roll. Mr Koch benefits. He has governed an allegedly ungovernable city for 12 years, as long as the famous Fiorello La Guardia. His experience, courage and *chutzpah* are not in question, and he is making the most of them in this campaign.

Two of his three opponents for the Democratic nomination have made the mistake of attacking Mr Koch on his strong ground. Mr Harrison Goldin, the comptroller of the city for the past 16 years, has tried, and failed, to sell himself as an even tougher cop by demanding that drug addiction be made a crime. Mr Richard Ravitch, a local builder who has headed several government agencies, has done equally badly in his attempts to present himself as a more competent manager than the experienced mayor. Like Mr John Anderson in the 1980 presidential election, Mr Ravitch has claims to be the thinking man's candidate. But unless the polls are wildly wrong, the Democratic nomination is now a two-way contest between Mr Koch and Mr David Dinkins, the Manhattan borough president.

Everybody agrees that Mr Dinkins, who is black, is a gentleman. The worst thing said about him in this campaign is that he failed to file his income-tax returns in 1969-72. He promises to work to restore racial harmony in a city that, he says, has been polarised by Mr Koch.

When, in the latest of several recent racial attacks, a 16-year-old black boy, Yusef Hawkins, was killed in Bensonhurst, an Italian-American neighbourhood of Brooklyn, by a mob of white boys, Mr Dinkins noted that "the tone and climate of this city does

get set at City Hall". The climate is certainly ugly. Demonstrators grieving Hawkins's death were met by a white crowd chanting "Nigger go home". Some in the crowd waved watermelons aloft. When Mr Koch went to a wake for Hawkins, he was booed by mourners.

Such incidents have helped Mr Dinkins win an attentive hearing. New York is a city where "liberal" is not yet a four-letter word. For many white voters, by no means all of them middle-class, the fact that Mr Dinkins is black is a plus. They believe fairness demands that New York should at last do what Chicago, Detroit, Washington, Atlanta and Los Angeles have already done and elect its first black mayor. Even so, Mr Dinkins will find it hard to get more than one-quarter of the white vote in the Democratic primary.

He will have to get out the black vote to win on September 12th with the 40%-plus share of the votes he needs to avoid a runoff. He has asked the Rev Jesse Jackson for his help. But this move risks losing Mr Dinkins the votes of the 20% of New York's Jews who support him now. Nobody has forgotten that Mr Jackson once called the city "Hymietown".

Usually the Democratic primary is all that matters in New York. Usually the mayoral election is a formality. No Republican candidate has won it since Mr John Lindsay in 1965. Mr Koch got 76% of the vote in 1985; 75% in 1981. With an exciting Republican candidate, this election promises to be different.

Mr Giuliani's record as a tough, incorruptible United States attorney in New York, who led mobsters and insider-traders off in handcuffs, made him the favourite to win when the electioneering started. He seemed to be hitting all the right notes in bashing away at what he calls his four Cs: crime, crack, corruption and compassion. Political pros call it the "Rambo-Mother Teresa strategy".

Mr Giuliani is still regarded as the near-certain winner of the Republican primary but an unhappy and blunder-filled campaign has converted the long opinion-poll lead he had over Mr Koch for the mayoral election into a deficit. Not all the damage is self-inflicted.

A Republican opponent, Mr Ronald Lauder, has so far spent more than \$10m of his mother's cosmetics fortune in the primary, much of it on television advertisements that ridicule Mr Giuliani as a hypocrite. Mr Lauder, a determined spoiler, is committed to run as the Conservative party's candidate if he is beaten in the Republican primary on September 12th.

President Bush had difficulties with the Italian name at a Republican fund-raising dinner: "Giu . . . Ger . . . Giovanni . . . Gerlani." And Mr Giuliani's hesitating reassessment of his views on abortion hurt him politically. He was suspected by some of

bending his principles to political calculation when he shifted from pro-life towards pro-choice (the change in abortion politics is looked at in the next story).

He lost support among homosexuals by refusing to join Mr Koch in this summer's 250,000-strong Gay Pride parade. More sensationally, he lost broad support when it was alleged that, during his time as United States attorney, his aides were cruel to a survivor of Auschwitz. Mr Simon Berger claims that, to try to make him confess to bribery, Mr Giuliani's aides forced him to face a blackboard where was written "*Arbeit macht frei*": the words over the concentration camp's gateway. Mr Giuliani cannot even count on the support of his co-religionists. He is said to remind many Roman Catholics of the priest who heard their first confession.

Mr Giuliani is still a strong candidate. But unless he can pull his campaign together, the winner of the Democratic primary will win in November. And it could again be Mr Koch—even though many New Yorkers are groaning "enough already".

Abortion

Silent majority awakes

SOUTH CAROLINA AND CALIFORNIA

A REPUBLICAN primary for a seat in the South Carolina legislature that the Democrats are not even contesting is hardly the stuff of national headlines. But the result of the Hilton Head primary on August 22nd looks like a straw in a national wind. The election turned on the issue of abortion, and the winner, Miss Holly Cork, was the most

pro-abortion (pro-choice) of the three candidates running. Second came Mr David Ames, who began by trying to avoid the issue and ended by saying he favoured keeping abortions legal. Mr Robert Graves, the only candidate to oppose abortion, came third.

If Miss Cork, who is 23, wins the run-off next week she will succeed her father as state legislator for Hilton Head. Her success may have as much to do with his popularity as with abortion. But the same cannot be said for Mr Graves's failure. He got strong financial support from the national anti-abortion (pro-life) forces, who dispatched Mr Burke Balch, a big cheese in the National Right to Life Committee, to give a press conference the day before the election urging people who cared about the issue to vote for Mr Graves.

Much the same thing happened in a recent Republican primary for a state seat in California. In a district in the heart of Republican territory, in San Diego and Riverside counties, the race for the Republican nomination went to a dark horse who is pro-choice. By a short head, Miss Patricia Hunter defeated the favourite, Mr Richard Lyles, who, like Mr Graves in South Carolina, would restrict abortion to cases of rape, incest or where the life of the mother is in danger.

Since this is the president's position, the Republican party may be growing a little worried lest the Supreme Court, with its recent decision allowing abortion to be restricted in Missouri, has awakened a silent majority. Although there are many pro-choice Republicans and pro-life Democrats, they are both very much in the minority within their party. If, indeed, the electorate is going to vote for pro-choice candidates, Democrats will benefit.

The opinion polls seem to suggest the majority is stirring. A *New York Times*/CBS poll taken in July found that the proportion in favour of legal abortion had increased from 44% to 48% since the court's ruling; the proportion against any legal abortion had dropped from 13% to 9%. More significantly, a Harris poll taken in July asked people whether they would actually change their vote if they disagreed with their otherwise preferred candidate's stance on abortion: 45% of the pro-choice voters said they probably would, while 57% of the pro-life ones said so. But since pro-choice voters are more numerous, the advantage would lie (29-21%) with the pro-choice candidates.

The candidates are taking this on board. In several of the races for governor now heating up, the pro-life candidates have been waffling, or even changing their positions.



But the voters are not on her side

Two states are choosing governors this year. In New Jersey, Mr Jim Courter, the Republican candidate, who has long opposed legal abortion and voted that way in the House of Representatives, now says he would uphold the state constitution, which permits the public financing of abortion. In Virginia, Mr Marshall Coleman, the Republican candidate, has been muddying his position relentlessly.

Likewise, among the early candidates for next year's governors' races, the pro-life candidates are beginning to trim to the breeze. In Massachusetts, Mr Francis Bellotti, who as state attorney-general has argued for parental-consent laws and against state financing, now seeks a constitutional amendment granting a woman the right to legal abortion. He is trying to head off his pro-choice rival for the Democratic nomination, Lieutenant-governor Evelyn Murphy.

In Florida, two Democrats who hope to challenge Governor Bob Martinez are both pro-choice, but the one who favours public financing, Mr George Stuart, is suddenly doing better in the polls than the one who does not, Representative Bill Nelson. In Illinois, Mr Neil Hartigan wants to become Democratic governor next year when Mr Jim Thompson retires. So he says he favours letting women choose. But as state attorney-general he will this autumn be arguing very differently before the Supreme Court in the case most likely to overturn *Roe v Wade*, the court's pro-choice precedent.

These would-be governors may be overreacting. Miss Ileana Ros-Lehtinen, the Republican candidate in the special congressional election to succeed Claude Pepper in Miami, won the contest on August 29th despite her unflinching pro-life position. But, in the end, abortion played little part in that race, which was dominated by the (Republican) aspirations of Cuban immigrants and the (Democratic) fear of those aspirations.

## Congress

# Not Pygmalion

**A**SORRIER episode could not have befallen a nicer politician. Representative Barney Frank is at the centre of a seedy ethics storm, involving prostitution and homosexuality, which could well end his distinguished career. Characteristically, Mr Frank is being open about the scandal, and this might, just, save him.

Mr Frank, a liberal Democrat from Massachusetts, is one of two openly homosexual members of Congress. The story, unearthed by the *Washington Times* and confirmed by Mr Frank, goes back to 1985. After replying to an advertisement, Mr Frank paid \$80 to have sex with Mr Steve Gobie who, at that time, was on probation



Frank faces the music, frankly

in Virginia for convictions including oral sodomy and possession of cocaine.

In what he said was an attempt to steer Mr Gobie away from prostitution ("I thought I was Henry Higgins"), Mr Frank offered him a job. He paid him up to \$20,000 a year as a personal aide, driver and housekeeper; this covered the cost of Mr Gobie's lawyer and of court-ordered sex therapy. He fired him in 1987 when he discovered that Mr Gobie and a woman friend were using his Capitol Hill flat for prostitution. Mr Gobie claims that Mr Frank knew that his flat was being used in this way; Mr Frank denies this.

This will be one of many points that will come up at the ethics investigation which almost certainly will be conducted by the House of Representatives, and which Mr Frank has asked for. House rules require members to conduct themselves in ways that reflect "creditably" on the House. There could also be a criminal inquiry (a right-wing lawyer has already filed suit): sodomy is a felony in Washington (though this law is not generally enforced) and prostitution is a misdemeanour.

The irony is that Mr Frank himself has been taking an active role in ethics matters. He and two other Democrats demanded a House ethics committee inquiry into the behaviour of Representative Gus Savage, a Democrat who has been accused of propositioning a Peace Corps volunteer while on a congressional junket. At the request of the Democratic leaders, the committee is also in the middle of investigating Mr Donald Lukens, an Ohio Republican who has been convicted of having sex with a 16-year-old girl.

Politically, it will be Mr Frank's constit-

uents who will judge him. Republicans in Massachusetts are making much out of the incidents. But Mr Frank's honesty and his reputation as a thoughtful representative, despite the colossal misjudgment he showed over Mr Gobie, might save him from being thrown out of office next year. He has won contests in his district that would have tripped up lesser campaigners. Last year he won with 70% of the vote, even after taking the politically risky step of announcing his homosexuality.

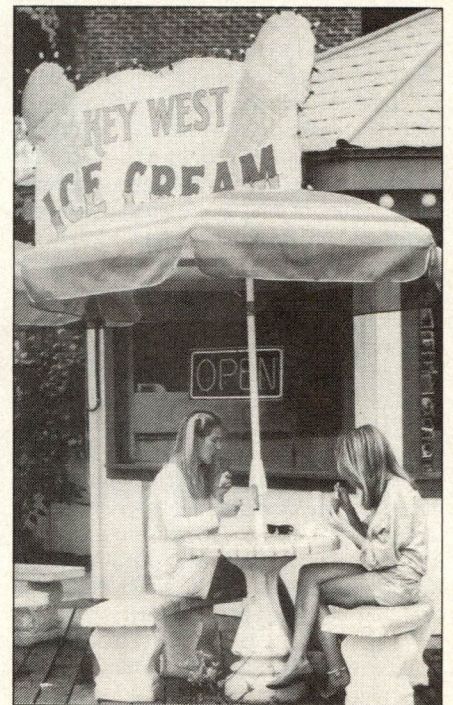
## Dairy products

# Purer than pure

WASHINGTON, DC

**F**IRST the fuss was about beef; now it's about cows. In January America nearly went to trade war over its farmers' right to use bovine-growth hormones, arguing, correctly, that Europe's antipathy to hormone-treated beef was based on groundless, or at least unproven, consumer fears. One of the government's unadmitted reasons was that such fears would spread to American consumers. Now retailers are anticipating that America's own consumers will express similarly groundless fears over hormone-treated dairy cows. On August 23rd five supermarket chains and an ice-cream maker said they would not take milk products from hormone-treated cows. As with Europe's beef, it is not the products' safety that is at issue, but the public perception of the products' safety.

The hormone in question is a kind of



A simple pleasure complicated?

bovine-growth hormone called somatotropin, an entirely natural protein made by cows' bodies and now, thanks to genetic engineers, also made by bacteria. Injected into cows, it can increase their milk yields by 10-25%. The Food and Drug Administration, which has been running experiments to see if it is safe, has not reached a final decision. But there is no evidence yet that it is not safe, and no reason to think that it would not be. Normal milk contains the hormone, which, like most proteins, is digested in the human stomach, an organ designed for that purpose.

The curious thing about the present controversy is that it conflates two entirely different issues: one medical, the other economic. The immediate cause of the five supermarkets' action was a campaign by Mr Jeremy Rifkin's anti-genetic-engineering organisation, the Foundation on Economic Trends, to persuade them that somatotropin makes milk unsafe. The foundation based its campaign on a (discredited) scientific paper that claims the hormone just might survive the stomach, get into the blood and affect development. Ben and Jerry's Ice Cream reached the same conclusion for a different reason: to save the family farm.

Ben and Jerry's is a phenomenally successful small company started 11 years ago in Waterbury, Vermont, by its eponymous owners. It hit the market at a time when superior, expensive, "home-made" ice cream took off. The market for premium ice cream is now worth about \$500m, of which Ben and Jerry's has about 10%. The company has now decided not to use milk from somatotropin-treated cows (if and when the FDA approves it), and to make a virtue of its decision by adding a label to the side of its hormone-free ice-cream cartons saying "Save the Family Farm".

It argues that the 450 small farmers on which it depends in Vermont are threatened, rather than helped, by a product that increases the productivity of cows. The market for milk has long ago reached its natural ceiling and profits are made only by increasing economies. Every notch on the scale of productivity means fewer cows, which means fewer farmers, which means more of Vermont in the hands of condominium-builders.

The dilemma for dairy farmers is acute. If, as the five supermarket chains are gambling, the consumer is going to be prepared to pay more for unadulterated milk products, even when no risk is proven, then the farmers will want to avoid hormones. The five chains include Kroger and Safeway, which between them own 2,300 supermarkets. But in doing so, the farmers would be missing out on a productivity boost that could save their businesses in an oversupplied market.

## Drugs

# Off to war they go



Bush leads his anti-drug warriors to a non-holiday chat

COLOMBIA'S courageous bid to restore its rule of law gave President George Bush the chance of a startling curtain-raiser for the drug policy he will be announcing when he gets back to work on September 5th. He rose to the occasion.

He interrupted his Maine holiday to announce emergency military aid worth \$65m for Colombia. He then summoned his top men, including the defence secretary, Mr Dick Cheney, and the attorney-general, Mr Dick Thornburgh, to Kennebunkport for a discussion of the military options. Colombia's President Virgilio Barco broadcast an eloquent message on the television networks. America, alive with the sound of martial anti-drug music, will be unusually receptive when Mr Bush recommends, as his drug chief, Mr William Bennett, has said he will recommend, that the drive against drugs be given priority over all other social programmes.

The main focus of the new policy is on the American drug-consumer. But Mr Bush will also be calling for a good deal more money to be given to Colombia, Bolivia and Peru to help those countries stop the growing of coca and the making of cocaine. As a foretaste of what is to come, Colombia, which accounts for 80% of the cocaine that enters the United States, was slipped that emergency military-aid package.

The package includes 20 Huey troop-carrying armed helicopters, small aircraft, assault boats, communications equipment, field trucks, guns and ammunition. These, particularly the helicopters, are things that the Colombian army and police force need; moreover, they are being delivered fast with

no fuss or bureaucratic bother. The money is said to have been discovered in an emergency foreign-aid fund, which is now empty.

Earlier this year Congress promised Colombia \$5m to help it to protect its judges from the terrorism of the drug gangs: 50 judges have been killed in the past ten years; hundreds have been intimidated into giving up. But that money, mingy in the first place, has been unconscionably slow in arriving, held up in Washington while questions were asked about what precisely it should be spent on.

Mrs Monica de Greiff, Colombia's justice minister, who is in Washington to talk with Mr Thornburgh about extradition procedures, made a moving public plea for an extra \$19m to pay for bullet-proof cars for the braver judges who still carry on. Despite death threats, against herself and her three-year-old son, Mrs de Greiff denied rumours that she was throwing in the sponge: Colombia has had five justice ministers in three years.

Some 50 American servicemen are included in the military package: their job will be to advise the Colombians on the use of the equipment, and other technical advice. The administration has not flatly excluded the possibility of American troops being deployed and Mr Thornburgh noted that any request for military assistance would be looked at seriously. But, to the administration's relief, though not to its surprise, Mr Barco told Mr Bush that the presence of American troops would "not be necessary".

It is a sign of exceptional times that a *Newsweek*-Gallup poll showed 53% of the American public supporting the idea of

sending American soldiers to fight the drug war in Colombia. Whether or not this jungle attitude would survive the first jungle casualties, there does seem to be a general belief that the military machine, which costs the taxpayer such an enormous amount of money, should play a more active part against the drugs than many Americans regard as the country's number-one enemy.

Reflecting this sentiment, the anti-drug bill, passed last year, gave the armed services a bigger role in tracking and intercepting the drug traffic (though the arrest of drug traffickers is still left to the Drug Enforcement Agency or the Customs Service). Mr Cheney, who spent many years in Congress, is thought to be much keener than his predecessors were on involving the armed services in this complex battle.

But a policy based on interception is now out of favour. There is not much point, argues Mr Thornburgh, in confiscating a cargo of cocaine, or catching couriers, both of which can and will be swiftly replaced; it is time to disrupt the traffic by going after the top drug-barons. Easier said than done. But the one thing that Colombia's gang-leaders, who have successfully terrorised their way out of Colombian justice, are said to fear is extradition to the still unterrorised American courts. With bravado, the top men sign themselves "the extraditables".

### The extraditables

Several Colombians were extradited in the early 1980s but in 1986 Colombia's Supreme Court, which had been steadily losing its justices to murder, ruled that the 1979 extradition treaty with the United States was invalid. President Barco is now hoping that the country's state of siege will enable him to extradite a suspect without going through the whole judicial process. The Americans, who have a list of about 80 Colombians who are wanted for questioning, recognised only half-a-dozen names among the 11,000 people rounded up last week, and found just one man, Mr Eduardo Martinez Romero, who has been indicted by an American court (a federal grand jury in Atlanta) and is therefore eligible for extradition.

Mr Martinez, an economist, is alleged to have run a big money-laundering scheme that operated out of Atlanta. He was caught in Panama after an elaborate two-year undercover operation, but slipped away before he could be arrested. The Americans, who would dearly like to get their hands on him, have presented the extradition documents in Bogota; Mr Martinez and his lawyers are appealing the order. Colombia, despite its hideous violence, is not a country where the law can be over-ridden for emergencies as simply as it is, for instance, in Israel.

Mr Martinez's money-laundering activities point to another area where the Americans hope to crack down. Many billions of

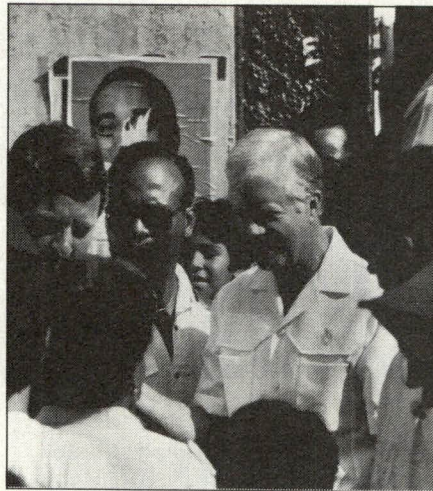
dollars of drug-money pass each year through the international banking system, their safety assured by the banks' competitive respect for their clients' privacy. This money is now being rather more vigorously chased, and the banks are said to be a mite more co-operative.

Getting the illicit money to the bank can be a little harder than transporting the drugs the money bought. A couple of small-fry launderers, Mr and Mrs John Posada, were caught in New York last week sitting on \$4m in small-denomination notes: bulky enough loot, said one policeman, to fill a swimming-pool.

### Presidential libraries

## His second term

ATLANTA



Carter meant well in Panama

THE Carter Presidential Centre in Atlanta is getting ready to receive guests for an unusual conference. Through the patient efforts of ex-President Jimmy Carter, delegates from the Ethiopian government of President Mengistu Haile Mariam, and from the Eritrean rebels who are fighting him, are being brought together on September 7th in an attempt to put an end to their civil war. This particular Ethiopian conflict has dragged on for 18 years or more, and the matter at issue is simple. Addis Ababa wants Eritrea to continue as a province of Ethiopia; the Eritrean People's Liberation Front wants it to be independent.

Mr Carter has defined his role in the meeting as that of a neutral observer; he will enlarge it to that of mediator if the opposing parties want it. He holds that bringing the two sides together will help them to understand each other, and that understanding tends to produce settlements. The trouble in this case seems to be that the two sides already understand one another only too well.

Still, there are signs of battle-weariness,

and Mr Mengistu's difficulties have lately grown to an extent that might reasonably interest him in compromise. Mr Carter's advisers, the scholars who conduct this part of his centre's long list of activities, get encouragement from the facts that the two sides have agreed to meet at all, that they are doing it without preconditions and in the presence of third parties, and that they are willing to let all this be made known. Nobody knows how long the Ethiopian-Eritrean talks may take.

Several overlapping circles of activity make up the Carter centre, which opened in 1986. Scholars and organisers conduct ambitious, in some cases strikingly original, programmes of study and consultation on many aspects of the human condition. Many of the scholars are also teachers at Emory University in Atlanta, where Mr Carter himself, with the title of distinguished professor, teaches two or three days a month. The core of the operation is the library and museum housing the White House papers of the Carter term, stored and managed by the National Archives.

Federal money defrays the archival and museum costs, but Mr Carter had to raise the money to get the place built. His is the eighth federal presidential library; the ninth, Mr Ronald Reagan's, is expected to open in southern California in 1991. Nothing systematic was done about the papers of the first 29 presidents, with the exception of Rutherford Hayes who providently, before his death in 1893, placed his papers in the hands of the state of Ohio, which keeps them still. It was Franklin Roosevelt who brought the question, what to do about presidential archives, into focus, and his model has essentially been followed.

Congress, while it accepts the presidential library as a necessary and useful institution, has grown distinctly uneasy about the cumulative cost as one president follows another. Mr George Bush, whose library when he departs from office will be the tenth in the series, will be the first president required to find not just the money for his library buildings, but also an endowment to defray some of the running costs.

Missing from the series is still the library of Mr Richard Nixon; this is because Congress, in the wake of the Watergate scandals, ordered the government to take possession of his tapes and public papers and keep them near Washington. Work is starting on a Richard Nixon museum at his Californian birthplace, Yorba Linda, but it will not be a presidential library unless or until Congress lifts its restriction on the Nixon records.

### Like a bloodhound

While, under present law, each of the libraries has to conform to archival standards laid down from Washington, this does not stop them taking on a shape and a personality of their own. The chief planner of the Carter

## Turtles versus shrimps

GALVESTON, TEXAS

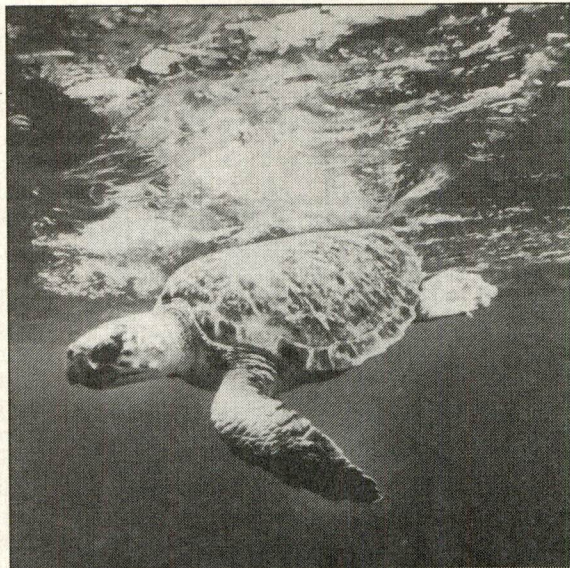


WHEN Mr Robert Mosbacher joined the cabinet as commerce secretary, he cannot have expected that his first deeply contentious decision, which offended both parties, would be about turtles. Nor could he expect that his first attempt to take that decision would lead to a blockade of Galveston port near his Houston home.

The blockade, in July, consisted of shrimp boats whose owners were angry at Mr Mosbacher's ruling that they must use devices to keep turtles from getting caught in their nets. Mr Mosbacher backed down, hoping for 45 days of calm in which to regroup. But he was taken to court by conservationists, demanding reinstatement of the rule. They won, so Mr Mosbacher then fell back on a temporary compromise requiring shrimpers to lift their nets every 105 minutes so that any trapped turtles could escape before they drowned. On September 7th he must bring in a permanent rule.

The issue is simple. Turtles are drowning in shrimp nets at a rate of about 11,000 a year. About 500 of those drowned turtles each year are of a species known as Kemp's ridley, which is so scarce that only 600 nesting females still come ashore each season to lay eggs at their only nesting site in Mexico. Shrimp boats are about to make a species extinct and the endangered-species laws require the government to prevent them doing so.

After exhaustive study, the National Marine Fisheries Service, a branch of the Commerce Department, has concluded that it is easy to stop turtles drowning in nets by fitting "turtle-excluder devices"—large grills—to the mouths of the nets. These reduce the size of shrimp catches by less than 2%, while keeping 97% of turtles which would otherwise be caught out of the nets. Florida, prompted



The nets await him

by the arrival of a heap of dead turtles on a beach last spring, passed a law requiring the use of TEDs in its waters (up to nine miles offshore). In May, Mr Mosbacher followed suit with a federal regulation.

Atlantic shrimpers, who seem to be made of more reasonable stuff than those in the Gulf of Mexico, quickly complied.

But Texans and Louisianans screamed that TEDs would ruin their livelihoods. They got the backing of their congressmen, blockaded Galveston with their boats and forced the commerce secretary to back down.

To be fair to them, they operate on tight profit margins, where even a 2% cut in catch makes a difference. Of the 750m pounds of shrimp (worth \$2.3 billion) eaten by Americans, only about one-third are home caught, so the price is kept low by foreign competition. Moreover, the average shrimper can go for a year without catching a turtle, and seven years without catching a Kemp's ridley. But with 12,000 boats operating, one Kemp's ridley per boat every seven years is a heavy toll.

The shrimpers mostly work at night between July and September, trawling in water up to 100 feet deep. Since shrimp are so short-lived, overfishing has not become a problem. But shrimpers tend to be a fairly bloody-minded lot. A few years ago they were unpleasant to the many Vietnamese who had joined the industry and were making a success of it. They break rules that annoy them: nearly all the boats watched by the Coast Guard last week were breaking the law by trawling for longer than 105 minutes at a stretch. They claimed ignorance of the rule when stopped.

Mr Mosbacher is finding, painfully, that there is no middle ground between such people and the turtle lovers. Five conservation organisations, who want TEDs and object to the 105-minute rule just as much as the shrimpers do, have filed a suit in a court in Washington. And Mr Mosbacher has to make a decision on September 7th.

centre was Mr Carter, and he has brought something into existence that mirrors his own character and experience. "I didn't want a monument to myself," he said at the time his centre was opened.

Obviously that is what these things are; all the same, what Mr Carter said was true. He wanted a machine that he could use to get things done. His opinions of what is right and necessary for the world have not changed much since he was president, and in that sense he can be said to be using the centre to pursue the unfinished business of the Carter administration, so abruptly interrupted by his electoral defeat in 1980.

Conflicts, denials of human rights, hunger, disease, military competition, unproductive agriculture, economic error: Mr Carter trails after them like a bloodhound,

taking off to Panama, Beijing, Khartoum or Addis Ababa, convening conferences on the Middle East, on Latin American debt, on the weaknesses of government in Africa and on the means of combating avoidable disease. The level of quality at these conferences has been high. Good people turn up for Mr Carter.

All presidential libraries, or rather the museums that accompany them, attract tourists. Usually it is their policy to do so, but if, as often happens, their planners also seek the proximity of a university, they can run into trouble. Academics do not always want a big influx of tourists, as the Kennedy library planners found at Harvard and the Reagan planners found at Stanford. But Emory University, the rich and rising academic partner that Mr Carter found, has

welcomed the Carter centre and given it priceless support.

In planning for a big flow of tourists through his museum, however, Mr Carter also planned an ample access road. The opposition to the road has been vociferous, the university faculty has been among the opponents, and the lawsuits about the road seem never to end; whether it will ever get built is uncertain. However, nothing like the anticipated flow of tourists has turned up; instead of 600,000 a year it is about 130,000, and many of those are school classes who are brought by invitation during two spring months. It is a curious fact that, already, about a third of all who come are too young to remember that Jimmy Carter was once president of the United States.



In wrecking mood, Hun Sen, Sihanouk and Khieu Samphan

## Back to the battlefield

FROM OUR PARIS CORRESPONDENT

**The skies are darkening again over Indochina. Here are reports on the breakdown of the Cambodian peace talks, on the rising numbers of Vietnamese boat people and on Vietnam's anti-reform communists**

**P**OOOR Cambodia is to have no rest from its troubles, at least not yet. The 19-nation Paris conference that had worked all month for a peace settlement ended on August 30th without result. France had co-chaired the conference with Indonesia, and French officials put a brave face on the failure. They talked of reopening the talks when the chances of agreement were better, perhaps next spring. But that would come long after the withdrawal of the last of Vietnam's occupying troops, which is promised for September 26th. In that time Cambodia's rival factions would have little to restrain them from turning on each other in an all-out civil war.

Foreign ministers, including those of America, Britain, China, France and Russia, gave the conference a grand send-off at the beginning of August. The aim was a peace treaty involving international supervision of

the Vietnamese withdrawal and a ceasefire between the forces of the Vietnam-backed government in Phnom Penh and the anti-Vietnam resistance led by Prince Norodom Sihanouk. A transitional government would have been set up to prepare a constitution and free elections.

Ambitious as that sounds, there were grounds for thinking that the outside powers wanted to be done with Cambodia, and that the Cambodians themselves might at last be weary of the two decades of war and terror in which more than 1m of their countryfolk had died. Once the ministers had left, however, the working sessions quickly ground such hopes away.

Four Cambodian parties were represented: the government of Mr Hun Sen, and his three opponents in the resistance alliance. The three opponents are Prince Sihanouk; Mr Son Sann, a former prime minis-

ter; and the Khmers Rouges, who murderously ruled Cambodia under Pol Pot in 1975-78 and were represented in Paris by their smooth front-man, Mr Khieu Samphan. By mid-August it was clear that the four Cambodians were not ready to deal.

Nor were the Russians, Americans or Chinese ready or able to make the Cambodians deal. None of their senior ministers showed up for the final session. The Russians are pleased above all that Vietnam, the biggest recipient of their aid, is getting out of a costly and inconclusive foreign adventure; what happens in Cambodia afterwards is of less concern. The Americans want a settlement but do not seem willing to spend much diplomatic capital getting it. They are torn between distaste for any agreement that would give the Khmers Rouges a share of power and a desire not to trample on too many Chinese toes at once in the aftermath of the conservative crackdown in Beijing. The Chinese themselves would probably be content with any solution that dishes Vietnam. In practice, that means not abandoning the Khmers Rouges just now.

There were two main sticking points in the talks themselves, the second of which was decisive. The first was the Hun Sen government's objection to a peace-keeping role for the United Nations. Mr Hun Sen objects to it because the resistance alliance holds Cambodia's UN seat. Among non-communist powers, India alone recognises the Phnom Penh government. Mr Hun Sen, who agrees that the Vietnamese pull-out should be internationally watched (by whom is unclear), had raised hopes that his objection to the UN might be lifted when he allowed its fact-finding mission into Cambodia last month. Yet he remained obdurate to the end on any UN part in peace-keeping.

The UN fact-finding team itself was gloomy about the chances of keeping the peace between guerrilla armies fighting in Cambodia's mountains and jungles. It reported that peace-keepers would have to rely entirely on themselves for fuel and other supplies. Watching the Vietnamese leave would, it reported, require perhaps only 200 men. Supervising a ceasefire would need at least "several battalions", a commitment guaranteed to make the UN political affairs division—and its paymasters—blanch.

To make peace-keeping easier, the UN team said guerrilla armies should be regrouped in camps and disarmed. Mr Hun Sen, however, has insisted on a ceasefire in place to keep the Khmers Rouges a safe distance from Phnom Penh. Many, he believes, are across the Thai border in refugee camps.

All this might well have been soluble

had the four Cambodians been ready to strike a bargain among themselves. Here again there was a major and a minor sticking point. The minor one was whether Mr Hun Sen or Prince Sihanouk should have more power during the transition. The French had proposed a power-sharing arrangement to prepare for elections. This was to consist of a council of state, headed by Prince Sihanouk and including all four Cambodian parties. Mr Hun Sen would stay in charge of the government. The two fell out over who would control the army and the police.

There was a chance of their overcoming mutual distrust had it not been for a deep disagreement over the Khmers Rouges. This was the major obstacle. Mr Hun Sen, a former Khmer Rouge commander who knows their ways, wanted to exclude them from the transitional government. Prince Sihanouk likes the Khmers Rouges no more than Mr Hun Sen. They jailed the prince and killed several of his relations. Yet he hoped to include them in a settlement from the start—so as, he said, to tame and disarm them.

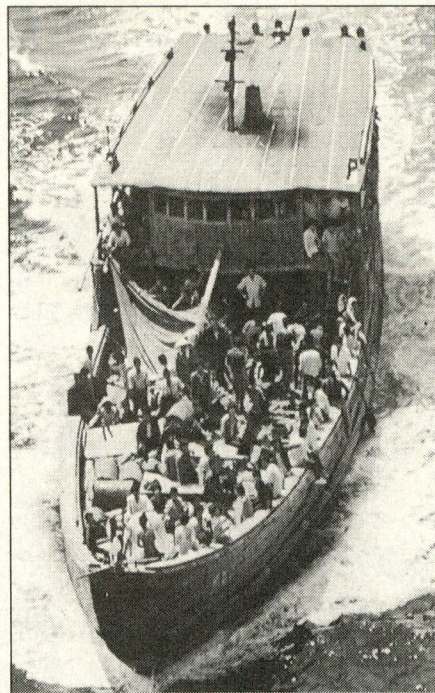
So what has the conference changed? The French say it has isolated the main problem—China and the Khmers Rouges—and provided a framework for agreement when the contestants are ready to settle. But the problem was known before, and a framework for agreement matters far less than the willingness to agree.

In many eyes Mr Hun Sen came to Paris as a Vietnamese marionette. He leaves with his stature enhanced and with a chance, it is said, of economic help and perhaps even diplomatic recognition, from France and Australia among others. Mr Hun Sen's growing self-confidence changed the chem-

istry among the Cambodians. With Mr Najibullah in Afghanistan as an encouraging example, Mr Hun Sen is no longer so fearful that he will be swept from power once his Vietnamese protectors have gone.

Prince Sihanouk has shown again what a dependent variable he is. He was hoping that Mr Hun Sen would be more worried about the future and the Chinese less loyal to their Khmer Rouge clients. The prince leaves the Paris conference moody and distracted by quarrels within his entourage. There can probably be no settlement without him. But there is little he himself can do to bring one about.

The enigma lies in the strength of the Khmers Rouges and the intentions of the Chinese. Few doubt the will of the Khmers Rouges to win power. But are they still the formidable fighters they were? Will China continue to arm them? Will the Thais, whose prime minister earlier this year talked of a "golden land" of peace in Indochina, let Chinese arms slip through to them? More questions than answers, but it is certain that Cambodia's woes are far from an end.



Japan ahoy

Philippines both report increasing numbers of refugees now coming over the horizon. Getting to the Philippines means abandoning familiar coastal waters and navigating 800 miles across the South China Sea. Japan requires them to undertake a journey of nearly 2,000 miles.

The host countries—so-called—are less interested in historical comparisons than in how to dispose of the new arrivals. So far this year two dozen boats carrying refugees have reached Japan. Packed gunnel to gun-

## Kon-Tikis, go home

THE odyssey of the Vietnamese boat people is beginning to resemble an earlier extraordinary event: the migration of the Polynesians to colonise the Pacific. Like those legendary seafarers, the boat people are covering great distances. Japan and the

## A long way from Warsaw

FROM OUR SOUTH-EAST ASIA CORRESPONDENT

THOSE neighbouring fogies, East Germany and Czechoslovakia, were unhappy about Poland's bolt for a non-communist government last month; far-off Vietnam was livid. *Nhan Dan*, the Communist party newspaper, urged the Polish party to "fight resolutely against the anti-socialist forces and take the country out of the present crisis". A few days later Mr Nguyen Van Linh, the Vietnamese Communist boss, seemed to have Poland (or maybe even Russia?) in mind when he told a party Central Committee meeting that "we express our profound concern over the danger threatening socialism [from the reforms] in some fraternal socialist countries."

The alarming events half a world away merely brought to the surface Vietnam's strongly held belief that economic reform may be all right, but political reform is

not. This belief even prompted some kind words for the hated Chinese. After the Tiananmen Square massacre in June, Vietnam's government issued a complicated statement suggesting that it could see why China did what it did.

*Doi moi*, as Vietnam calls its economic reform, has a hint or two of political relaxation about it. The Vietnamese talk of cutting bureaucracy and making government more efficient and less bossy. In the past year farmers have received fewer instructions about which crops to plant, people's committees have sacked some of their members, and the government has made efforts to let businessmen get on with business without being accused of "counter-revolution". Journalists can criticise corrupt officials, and condemn Ho Chi Minh's cruel land reform of 1956. Southerners who fought against North

Vietnam and the Vietcong are now sometimes credited with good qualities.

But for the most part in Mr Linh's Vietnam, as in Mr Deng's China, political reform stops at the economy's edge. Nobody—in print, on film or otherwise—is allowed to challenge the party's monopolistic right to rule. Letters are still opened and people are watched. Until a few years ago anyone involved in an anti-communist movement (they are started up from time to time in the south) could end up in a re-education camp; they still operate in secret for fear of reprisals.

In the communist world's debate about what sort of reform is needed, the Vietnamese have lined up against Poland (of course) and their patron Russia, and with their enemy China. But, like China, Vietnam may find that economic reform eventually produces political challenges to the party. At first the challenges will come from the south, but could easily spread throughout Vietnam. They are likely to end, as China's did, in tears.

nel, they have brought some 2,200 men, women and children, ten times the number for the whole of last year. The Japanese government said on August 29th that it will start screening its boat people to decide which are genuine political refugees.

Screening, which is a euphemism for fairly heavy-handed interrogation, has been adopted with enthusiasm by most host countries. Relatively few refugees persuade the interrogators that they would be persecuted if they were returned to Vietnam. So they are condemned as "economic migrants". This is what the Polynesians were, but in today's crowded world the phrase has become a term of abuse for those who have had the temerity to seek a better life in another country. Economic migrants from Vietnam are told that if they do not go back voluntarily they may be forced back, or left to rot in a camp with no prospect of making a new life elsewhere.

Hongkong has pioneered screening. It now has 55,000 boat people—four times the number who were there 18 months ago. They are packed in camps whose conditions hardly support the British colony's claim that it is treating them humanely. At one of these camps, Tai Ah Chau, rioting broke out on August 27th among refugees who claimed that they were hungry. It was put down by armed police. Three days later three boat people on the island were taken to a government hospital suffering from cholera. Rich Hongkong finds it embarrassing to be accused of keeping the refugees in what a visitor to the island has called "unimaginable squalor".

Still, it bears its disgrace cheerfully. The local Chinese detest the Vietnamese and, despite the colony's severe labour shortage, would happily see them all returned to Vietnam. A fragment of their wish may be coming true. Although still much higher than a year ago, the number of refugees arriving in Hongkong is declining from its springtime peak—perhaps because news of the colony's inhospitality has seeped back to Vietnam.

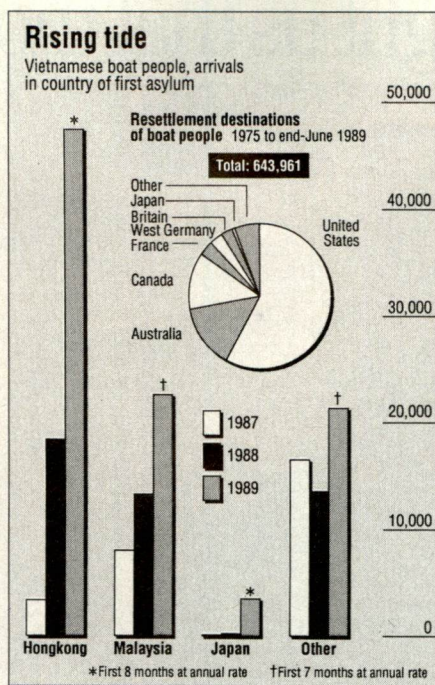
## China

# Hurtling into the past

FROM OUR CHINA CORRESPONDENT

**H**OW ruthless are China's new leaders? This week Amnesty International presented some of the evidence: "at least 1,300 civilians" dead and thousands more injured, because Chinese troops "fired indiscriminately into crowds in Beijing between 3 and 9 June"; 4,000 officially reported arrests since then; scores of publicised executions, and many more unpublished.

Zhang Weiping's moment of misery came too late for inclusion in the Amnesty report. For the crime of telephoning the



The countries to the south and west of Vietnam—Thailand, Malaysia and Singapore—have long had an inhospitable reputation, endorsed by their governments' push-back policy. Refugee boats try to avoid the murderous offshore waters of Thailand. The fate of one that did not was described this week by a 17-year-old girl, Phom Hong Cuc, the only survivor of a boat containing 150 refugees. She said the boat was boarded by Thais who committed robbery and rape before killing the occupants.

The Thai government blames such attacks on "pirates"; but this puts a romantic gloss on the Thai fishermen who have grown rich by attacking the boats. It is unlikely that the local police do not know who the murderers are, but they have presumably been bought off. There were wry smiles at the Geneva conference on the boat people in June when the Thai delegate promised a "safe reception" for new arrivals.

litburo's Standing Committee, warned senior party officials that "many problems, quite severe, do exist in the party organisation and the ranks of party members". Thus it was necessary to "dismiss those who practise bourgeois liberalisation from leading posts". This week Mr Song attended a Politburo meeting called to discuss "a few important questions concerning the strengthening of party construction".

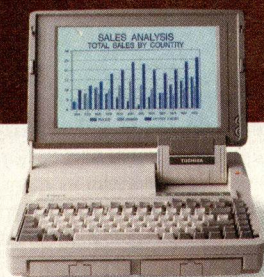
The words sound banal, but their meaning is not. Mr Song and his colleagues are deciding how wide and deep the purge of China's "bourgeois liberals" and "counter-revolutionaries" should be. The gloomy prediction of those who read China's political tea-leaves is that the party's Central Committee, due to meet in October, will approve measures of a ferocity last seen during Mao's "anti-rightist" campaign of 1957-58, when thousands of party members were sent off for "re-education".

If the tea-leaves are right, Mr Zhao Ziyang should be a worried man. Mr Zhao was the party boss when China's students began demonstrating last spring. He has not been seen in public since May 19th, when he made a tearful—and futile—visit to Tiananmen Square to ask the students to leave. If the conservatives have the votes for a full-blown purge, Mr Zhao will, at best, be castigated for "supporting the turmoil and splitting the party" (as the prime minister, Mr Li Peng, put it). At worst, he will face trial—and imprisonment or perhaps death—as a "counter-revolutionary". It could be the end of the man who tried, at the behest of Deng Xiaoping, to invigorate an economy threatened with paralysis.

It would also be a harsh fate for China, and not just because of the spiral of recrimination and revenge it would set off in the party. Already the conservatives are firmly in the saddle. Their power can be seen in the effort to re-establish party cells in government bodies, in contradiction to the 1987 decision to "separate party and government". And it can be seen in the attacks on Mr Deng's cherished economic reforms, which, despite the government's palaver about "deepening" them, are being swiftly rolled back. The latest assault on free markets came on August 28th with the announcement of another anti-corruption drive. Dismayingly, it includes plans to shut down private businesses the central planners decide are "not able to meet public needs": as the planners explain it, "too many companies have been set up".

It is now clear that Mr Deng has been unable to control the conservative forces he unleashed in the spring. To overcome the politically-too-adventurous Mr Zhao, Mr Deng had to enlist an old guard, including Mr Chen Yun, 84, Mr Peng Zhen, 87—the very central planners he had shoved out of power in 1987—and President Yang Shangkun, a vigorous 82. They are now ex-

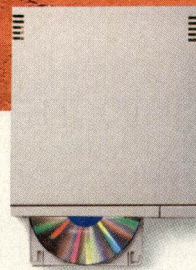
# History has taught us that those with the best



*Computers*



*Printers*



*Disk Drives*

Thousands of years ago, people who used the wrong equipment sometimes lost more than their jobs. Today's business world is just as savage. That's why, at Toshiba, we design, manufacture, market and support office products that adapt to the way you do business. From our portable computers, printers and computer disk drives to our copiers, facsimile

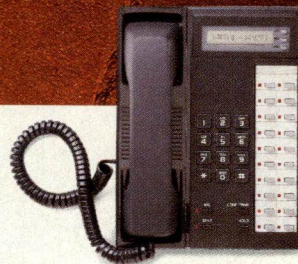
tools always come out on top.



*Copiers*



*Facsimile*



*Telephones*

machines and telephone systems. And we provide the kind of service and support your business needs to stay productive. For additional information on our full line of office equipment and support, call Toshiba America Information Systems, Inc. at 1-800-527-1557. After all, the importance of using the right business tools is something that's been around forever.

In Touch with Tomorrow  
**TOSHIBA**

acting their price. The Politburo is dominated by younger men such as Mr Li, the prime minister, his deputy, Mr Yao Yilin, and the new party boss, Mr Jiang Zemin. But they instinctively agree with the old guard in opposing free markets and free thinking.

Mr Deng knows as much, which is why he is now rumoured to be urging leniency for Mr Zhao, and why he has blocked President Yang's attempt to become his deputy on the Central Military Commission. But Mr Deng is an 85-year-old of uncertain health. For all his ruthlessness, so evident when he outfaced the students and Mr Zhao, his powers are waning. Those of men like Mr Li and Mr Yao are growing.

The party is moving back to where it feels most secure, to the Stalinist certainties of the 1950s. The sour consolation is that this attempted move backwards will fail—but only after China has lost years, and too many Chinese their lives and careers.

## Afghanistan

# Winning by not losing

**I**N THE six months since the Russians left Afghanistan, the mujaheddin guerrillas have not managed to capture any large town. Their massed assault on Jalalabad, using 15,000 men, was repelled with heavy losses. Kabul is at present vulnerable only to rockets, which kill civilians and thus turn people in the capital against the guerrillas. This week, as the summer fighting season was coming to an end in much of the country, the guerrillas were having a go at Khost.

This is a smaller town than the mujaheddin would like as a base for their "interim government", at present confined to Peshawar in Pakistan. Its advantage to the attackers is that it is only 25 miles from the

border with Pakistan. If captured, Khost would be fairly easy to supply from guerrilla bases in Pakistan. At midweek it appeared that the guerrillas had penetrated the outer defences of the town but were meeting stiff resistance. Both sides spoke of heavy fighting.

A success in Khost would help the guerrillas regain the world-wide respect they enjoyed during their ten years of fighting Russia's army of occupation. Respect will matter at the non-aligned countries' meeting, which was to start in Belgrade on September 1st. Mr Najibullah, who heads the Kabul government, was due at the meeting, seeking support for a political solution to the war. Although this sounds plausibly preferable to a military solution, the guerrillas fear it would give Mr Najibullah an unacceptably large say in any future government.

By simply holding out in Kabul and the other towns, Mr Najibullah can claim a sort of victory. One of his officials has said complacently, "Najibullah wins by not losing, and the mujaheddin lose by not winning." The Kabul regime has been cheered by a leaked cable to Washington from an American diplomat in Pakistan. It said that he doubted the mujaheddin could remove the Afghan government by force. (The diplomat has since been called home.)

One reason the guerrillas are weak is that they are split. Although the mujaheddin control much of the countryside, several commanders have made local deals with Kabul. The commanders can run their patch as they wish in return for not fighting the government. Some mujaheddin groups are actually fighting each other. A battle was reported this week between guerrillas fighting for control of a bridge over the Helmand river in western Afghanistan. Whoever controls the bridge can levy a toll on its users, many of whom are heroin traffickers.

Other guerrillas get caught up in tribal blood feuds that pre-date the war. In the most publicised of these, 30 guerrillas be-

longing to the Jamiat-i-Islami party were ambushed and killed in July by another Islamic group, Heshb-i-Islami. The Jamiat is commanded by one of the most successful guerrilla leaders, Mr Ahmad Shah Massoud. He controls much of the north and claimed this week to have captured Zebak, an important government post. In retaliation for the July ambush, Mr Massoud's men killed some 150 supporters of the group that did it.

In apparent protest, Heshb-i-Islami's leader, Mr Gulbuddin Heckmatyar, said this week that he would not take part in meetings of the interim government until an election was held in Afghanistan. Mr Heckmatyar, the interim government's foreign minister, believes that the mujaheddin can win Kabul, if not by an assault then by plotting a coup against Mr Najibullah. The new government would then impose its authority on the divided country. Those who think like him are becoming fewer.

## Japan

# A housewife and consumer

FROM OUR TOKYO CORRESPONDENT

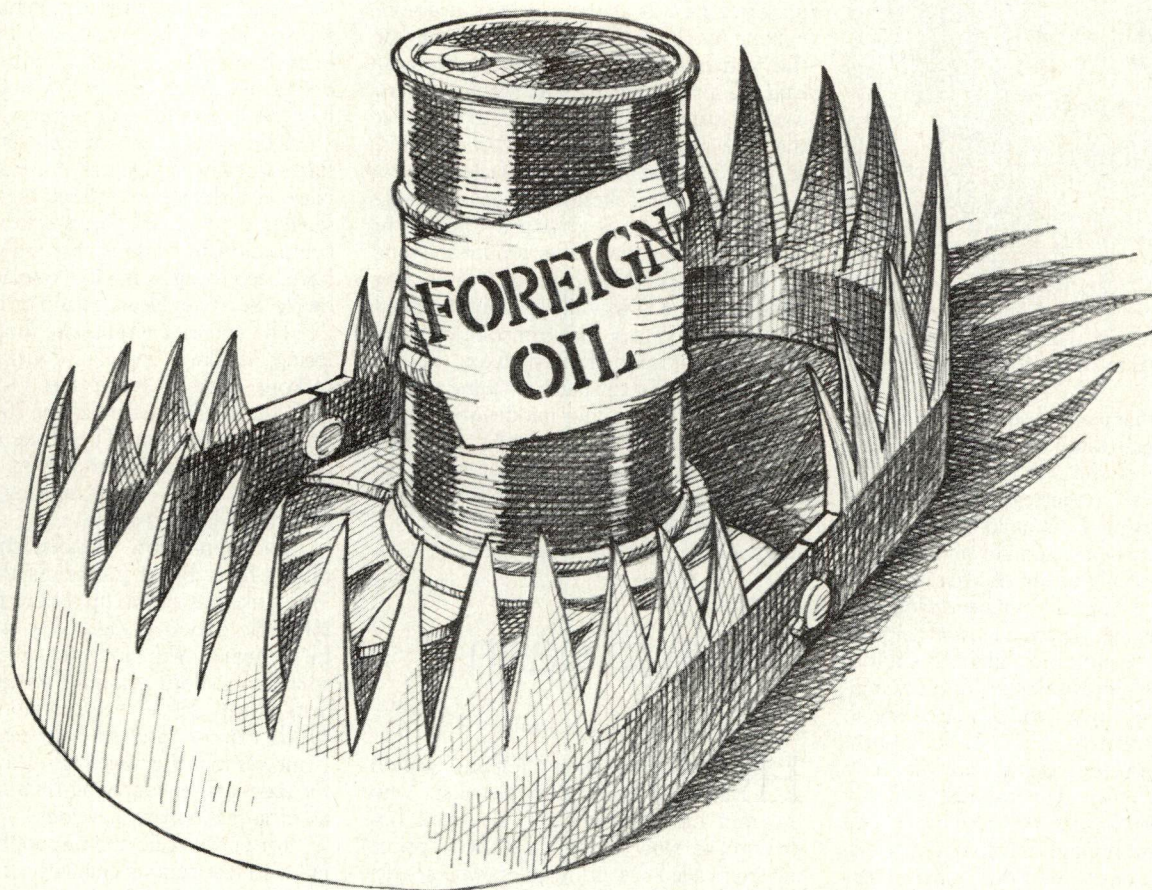
**T**OSHIKI KAIFU, Japan's prime minister for less than a month, barely got his feet under the desk before the party bosses who had installed him began manoeuvring over who should replace him. Mr Kaifu, who set off this week to meet President Bush in Washington, will, it is true, last longer than Mr Sosuke Uno. Mr Uno took over from the Recruit-tainted Mr Noboru Takeshita in early June and, tainted himself by a sex scandal, was out two months later. The hard men at the top of the ruling Liberal Democratic party agree that Mr Kaifu should keep the seat warm until the next general election—then that will be that for him. The main thing bothering them is when to call the vote.

In an election in July the Liberal Democrats lost their majority in the upper house of the Diet (parliament), but they still command 295 of the 512 seats in the more powerful lower house. That majority, however, is likely to be trimmed drastically, or even lost altogether, come the general election. This has to be held by next July at the latest. Some Liberal Democrats want to hang on as long as possible, banking on the voters losing interest in punishing the party further. Others see merit in a snap election in November or December. They argue that the longer they wait, the better organised the newly energised opposition parties will be.

The opposition has an issue to organise around: the hated 3% consumption tax. Four opposition parties have banded together to propose abolishing it. The ruling



Oh for a town to call home



## FOREIGN OIL: IT'S A SNAP

It would be all too easy to meet our increasing electricity demand with foreign oil. However, we already import nearly 50 percent of all the oil we use, an excessive dependence that could trap us again.

But the more we use nuclear energy, instead of oil, to generate electricity, the less we have to rely on foreign oil. Our 112 nuclear electric plants already have

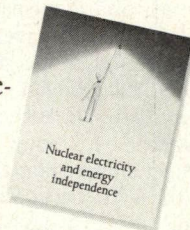
cut foreign oil dependence by 4 billion barrels since the oil embargo of 1973, saving us more than \$115 billion in foreign oil payments.

But 112 nuclear plants will not be enough to meet our growing electricity demand. More plants are needed.

We can help America avoid the foreign oil trap and maintain our energy independence by

relying more on our own resources, like nuclear energy.

For a free booklet on nuclear energy, write to the U.S. Council for Energy Awareness, P.O. Box 66103, Dept. BT08, Washington, D.C. 20035.



U.S. COUNCIL FOR ENERGY AWARENESS

**Nuclear energy means more energy independence.**



Now Moriyama shops for votes

party agrees that it could do with some revising. The biggest cause of the government's unpopularity is the wrath of housewives over the tax, which they pay and curse every day. The Liberal Democrats fear that, if something is not done soon to smooth these feelings, they could be out of office.

This was Mr Kaifu's motive for appointing Mrs Mayumi Moriyama chief cabinet secretary on August 25th. His first cabinet secretary, the 69-year-old Mr Tokuo Yamashita, was felled by yet another sex scandal: it seems he offered ¥3m (\$21,500) hush-money to a young prostitute with whom he had had an affair. The cabinet secretary briefs the press twice a day. The Liberal Democrats are hoping that frequent television appearances by the savvy Mrs Moriyama will win back women voters, and perhaps steal some thunder from the Socialists' popular leader, Miss Takako Doi.

Mrs Moriyama is an impressive woman, and may do it. But her appointment was an obvious ploy (as Mr Kaifu confirmed by embarrassingly introducing her as "an experienced housewife and consumer"); and it suggested a party bereft of ideas about how to save itself.

Mr Shin Kanemaru is the most influential of the senior Liberal Democrats who believe things to be so bad that the party should take the risk of an early election. Mr Kanemaru, 74, is the nominal head of the powerful Takeshita faction (the former prime minister himself is spending a period in the wilderness doing penance for the Recruit affair). He has been saying that the Liberal Democrats will sink further this autumn, when they reject the opposition's bills to scrap the consumption tax without offering any positive suggestions of their own. At the same time the ruling party's weak political-reform bills are likely to be jeered into limbo by the opposition. In short, runs the Kanemaru argument, the Liberal Democrats

have nothing to lose by an early election—and might gain by striking before the Socialists manage to recruit the 180 candidates they have threatened to put up.

Mr Kanemaru has axes of his own to grind. The sharpest is reserved for his former friend and protégé, none other than Mr Takeshita himself. Mr Kanemaru, who imagined he was at the centre of decision-making for the faction, has been stung that the "retired" Mr Takeshita has kept practically all power to himself. Mr Kanemaru was, for instance, almost the last to hear that the deal giving Mr Kaifu the prime minister's job had been signed and sealed.

What is Mr Takeshita up to? One suggestion is that he is getting his people in place ready to pounce after a poor showing by the Liberal Democrats in the coming election. Mr Kaifu is likely to be dumped then anyway. After that someone, preferably an accomplished party fixer, will be needed to rebuild the party machine while it shares power with minor middle-of-the-road parties. That someone, thinks Mr Takeshita, should be himself. Mr Kanemaru, for one, is far from sure that this is what the Liberal Democrats really need.

## Australia

### Down to earth

FROM A CORRESPONDENT IN MELBOURNE

HE MAY be an old union man, but Bob Hawke is brutal about strikers who threaten his government. "Overpaid bus drivers" is what Australia's Labor prime minister called the airline pilots who are demanding a 29.5% pay rise.

The 1,645 pilots on Australia's internal routes threaten the country's A\$22 billion (\$17 billion) tourist industry, its biggest foreign-exchange earner. Even worse, a settlement anything like the one the pilots want would send other pay claims soaring. The economy would be hurt, as would the voters, who go to the polls next year.

Mr Hawke's problems began when the pilots voted to fly only from nine to five until their claim was met. Supported by the government, the airlines sued for damages. Thereupon, on August 24th, all the pilots resigned.

The pilots claim their pay does not reflect their worth judged by global demand. Besides, they do not belong to the Australian Council of Trade Unions, which has negotiated a 6% wage deal with the government. The agreement is the cornerstone of Mr Hawke's economic policy, which can ill afford any setbacks. The country's credit rating has been downgraded by Moody's agency from AA1 to AA2. Mr Hawke counts on wages growing at not more than 7% a year and inflation staying at 7.5%. If the pi-

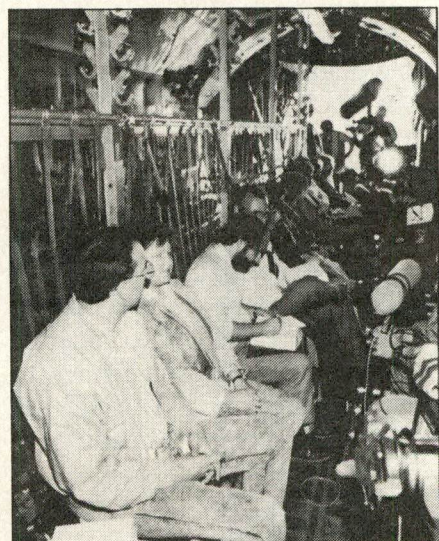
lots are successful, other unions might be tempted to act alone, threatening the accord. Whatever the line taken by the ACTU, unions need to show they can deliver: their membership has fallen from 56% of the workforce in 1976 to 42% in 1988.

The government has done what it can to keep Australia flying. It has turned ten air-force planes into fairly uncomfortable passenger aircraft. It has allowed foreign airlines that serve Australia to carry travellers on domestic trips. All in all, though, there have been seats for only about 7,500 of the 45,000 passengers who usually fly each day. Pilots working for Qantas, Australia's international airline, have refused to accept passengers on internal flights other than for compassionate reasons. Some Australians have been flying from place to place in their own country via New Zealand or Indonesia.

The domestic airlines are thought to be losing A\$10m a day. The tourist industry reckons that so far it has lost at least A\$500m. In Queensland alone 200,000 jobs depend on tourism. The strike could discourage Americans from visiting Australia; American travel agents already wince at Australia's hotel prices.

The opposition supports the government's fight. But it points out that the pilots' strike has shown up serious flaws in an inflexible national wage-fixing system. Pay in a high-growth industry like tourism, which can afford generous settlements, affects wages in less successful industries, which cannot. Still, the government can point out that the wages accord has worked for six years, encouraging high investment and leading to many new jobs.

Mr Hawke calls the dispute his government's most serious challenge. He has frequently compared his record of generally good labour relations with that of the previous Liberal government. If he can't win this one, the voters may give someone else a go.



And no view of Ayers Rock

## Why Lebanon tugs at France

FROM OUR PARIS CORRESPONDENT



The Foch sends Damascus an ambiguous signal

FRANCE'S courage and sense of duty have to be admired. But why did it stride so boldly to the very brim of the Lebanese inferno? Bigger outsiders (America) and closer ones (Israel) have burned themselves in Lebanon's 14-year civil war. France's present show of force off the Lebanese coast, which President Mitterrand oddly calls a "mission of safeguard", has raised the question, not just for the Syrians but among France's allies too, of how far it intends to go. Despite a look of improvisation, there is a pattern to what France is doing, though not one without risks.

France's policy towards Lebanon is guided by a mixture of idealism, internal politics and concern for Middle East power-balancing. Since fighting flared up around General Michel Aoun's Christian redoubt in and around Beirut last March, French politicians on right and left have been calling for France to act. The sight of shelling on the nightly television news stirred outrage (often, because of the emphasis on Christian victims, one-sided outrage).

France's historical ties with Lebanon reach back to the confessional bloodbaths of the 1860s, when France was appointed to protect Maronite Christians from attacks by the Druzes. After the first world war and the

break-up of the Turkish empire, France got the League of Nations mandate over Greater Syria, which it promptly broke in two, creating modern Lebanon. French lawyers drafted the 1926 constitution, which laid the framework for power-sharing between the religious communities. Apart from the brief civil war of 1958, this broadly worked for half a century.

France has ties of people as well. Hostage-taking and war have reduced the number of French people in Lebanon to 6,000 at the last count, four-fifths of whom have dual nationality. Yet French is the second language of Lebanon and France is the first country Lebanese who can afford it flee to. The number of Lebanese in France, a few thousand at the beginning of the decade, is growing fast. The mainly Christian Lebanese in France are vocal on behalf of their co-religionists at home. Though not organised enough to be a lobby, their voices are heard where it counts.

France played little part in the early stages of the civil war which erupted in Lebanon in 1975. Yet Israel's invasion in 1982, with its threat to finish off the Palestine Liberation Organisation, stirred France to act. Its forces helped to cover the evacuation of the PLO leader, Mr Yasser Arafat. Later, in

1985-88, French hostages in Lebanon became almost a national preoccupation. Once they were out—by official count, one at most remains—some people thought France would gratefully wash its hands of Lebanon. It did not.

When last spring's shelling erupted in Beirut, President Mitterrand asked other foreign leaders to join a peacemaking effort. Opposition politicians called for more active French involvement. The first, speaking of "national shame", was Mr François Léotard, a centre-right leader and former seminarian. Next, writers and intellectuals, many of them on the left, poured into the Lebanese embassy in a gesture of solidarity, demanding Lebanese passports. France's Christian Lebanese organised a big march.

This drumbeat of concern made it hard for the French government to appear as even-handed as it had claimed to be. In April the foreign minister, Mr Roland Dumas, sent Mr Jean-François Deniau, an opposition member of the foreign-relations committee, on an exploratory mission to Lebanon. Mr Deniau managed to make it sound as if France considered General Aoun, the Christian leader struggling to wrench Lebanon back from Syria, a martyr for western values. Coming from a member of the French mainstream right, the impression was doubly unfortunate. One of the anti-Muslim staples of France's far-right National Front is that Christians must stop France becoming "another Lebanon".

To undo Mr Deniau's error, Mr Mitterrand then dispatched Mr Bernard Kouchner, former head of Médecins sans Frontières, on a "humanitarian" mission. Though well meant, this had little effect. Under the eye of a minder from the French foreign office, Mr Kouchner at least trod on no more mines. The search for peace passed, after an Arab summit in Casablanca in May, from France to a trio of Arab nations, Algeria, Morocco and Saudi Arabia. The Arab threesome soon backed away, baffled.

France might have left things there had the fighting not further worsened in August, when Syria looked ready to organise a big ground attack against General Aoun's enclave. Mr Mitterrand put under steam a squadron of eight warships, including the aircraft carrier *Foch*, refusing to define the ships' task beyond "deterrence". They might have protected Maronites trying to leave, or supplies trying to get into the Christian port of Jounieh; or they could have jammed Syrian radar. The Syrians and the Lebanese Muslims declared that the French were war-mongering.

As the artillery war in Beirut became

slightly less fierce in the last days of August, the secretary-general of the French foreign office, Mr François Scheer, rushed to Damascus, en route to Beirut, to assure the Syrians that no belligerence was intended. Three of the *Foch's* support ships were withdrawn, and the flotilla stopped 190 miles from the Lebanese coast. At the same time France came up with a three-point peace plan, announced by Mr Dumas on August 27th. This calls for a ceasefire, for political reform and for withdrawal from Lebanon of Syrian and Israeli troops. The French warships did nothing on August 29th, when Syrian shells struck a tanker bound for Jounieh, setting it on fire and killing nine of its crew of 11.

Blowing hot and cold is a tactic for keeping an adversary off his guard. But who is France's adversary? It is in General Aoun's interest to draw outside powers into the fighting on his side. Yet, even if Syria overplayed its hand by trying to take over the Christian redoubt, the most France would be likely to do is to cover a Christian evacuation. Bigger military steps against the Syrians would be full of risk.

France's peace plan suffers not only the handicap of having countless failed precedents. The past months have exposed France's double interest: a genuine desire for peace, and an equally strong wish to see Syria contained. It is not fair to say, as some do, that France wants simply to protect the Maronites in Lebanon against the Muslims. Nor is it possible for the Syrians or anyone else in the region to treat France as a disinterested peacemaker. France is a large trader with, creditor to and weapons-supplier of Iraq—the armourer of General Aoun, and Syria's main Arab enemy.

Last week it was the turn of a Soviet envoy, Mr Gennadi Tarasov, to play mediator in Beirut. But Russia is a large supplier of weapons, credits and trade to Syria. Is it any wonder that even the French are now pinning their hopes on encouraging the baffled Arab threesome to have another go at sorting out the mess?

## Israel and the Palestinians Exhaustion

FROM OUR ISRAEL CORRESPONDENT

**P**ALESTINIANS in the Israeli-occupied Gaza Strip are facing a new deprivation. Israel has decided to restrict their use of facsimile machines, in the hope of stopping the transmission of leaflets and instructions between activists in the occupied territories and the leadership of the Palestine Liberation Organisation abroad.

Like many of the measures adopted by Israel since Palestinians started their uprising in December 1987, the ban on faxes

## After-sales servicemen

**I**T WAS indiscreet of Lieutenant-Colonel Yair Klein to yell orders in Hebrew at his non-commissioned officers while being filmed by an American television crew in Colombia. His presence there shocked many Israelis, and embarrassed their government, which has confiscated the colonel's passport pending an investigation. The colonel is a retired officer and, like all Israelis of his age, in the army reserve. Early in 1988 his team was training "peasant self-defence groups", under the auspices of Colombian army officers. Early this year President Virgilio Barco said the training must stop, since some of the groups were operating as death-squads for right-wing drug-dealing landlords.

Weapons are useless without after-sales service, meaning lessons in how to kill people with them. Selling aircraft is high finance: selling small-arms is more red-blooded. The Israelis sell good cheap rifles and accessories, as suitable for gangsters as for freedom-fighters and police-

men. The line between training-teams and mercenary fighters is blurred.

Governments send trainers to conflicts in which they are known to be (as the Americans put it) "covertly" engaged: Nicaragua, Afghanistan, Angola and so on. Governments also encourage arms sales. Sometimes they may not know what the salesmen and trainers are up to, sometimes they choose not to know. Sometimes their trainers are "retired" soldiers, who are allowed to re-enlist when the training is over.

British firms with official approval have provided arms and after-sales service in, for example, Kenya and Oman. Frenchmen stand by the governments of Gabon and the Comoro Islands. American ex-servicemen find jobs with their own government's non-military enterprises, such as the Drug Enforcement Agency's operations in Peru and Bolivia. Israelis have been sighted in, among other places, Zaire and Panama. Whether gov-

looks pretty easy to circumvent. Israel tried to stop international telephone calls from the occupied territories early on in the *intifada*, but gave up when Palestinians started making all their calls from East Jerusalem, formally part of Israel and therefore unaffected. Twenty months after it started, the *intifada* is still unquashed. Even so, Israeli pressure is having an effect.

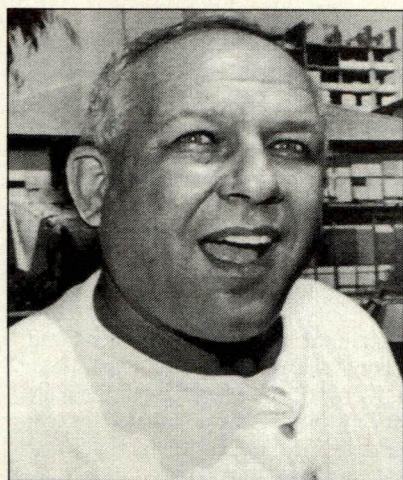
The Palestinians have lately begun to show signs of stress, fatigue, even desperation. Until recently Israeli officials who said it was only a matter of time before that happened were doing little more than thinking

wishfully. Now some Palestinians are starting to question whether it is all worth it. After months of arrests and raids, scores if not hundreds of the hard-core local leaders who form the backbone of the *intifada* have been rounded up, detained, deported or killed. The army and the Shin Bet security service appear to have organised ambushes of men they wanted. A Gaza man who was shot dead on August 29th was a leader of the *shabiba*, the youth wing of Fatah, the biggest grouping inside the loose coalition that forms the PLO.

With many of their leaders dead or in



Are they turning from stones to bullets?



Colonel Klein was indiscreet

ernments know what is going on, or choose not to know, is an interesting question. Israel promises a full investigation of Colonel Klein's activities. But governments that are keen to promote arms sales, and the influence that goes with them, are unlikely to be frank.

prison, ordinary Palestinians show signs of tiring. Two recent leaflets issued by the United National Leadership of the Uprising called for pupils to stay away from schools (recently reopened after a year-long closure) on days earmarked for general strikes, and for West Bankers to refrain from working inside Israel proper for one week in solidarity with their compatriots from the Gaza Strip, who have been on strike for a fortnight in protest against the introduction of new identity cards. A few months ago Palestinians treated the underground leadership's instructions as holy writ. This lot of orders went largely ignored.

The Israeli army is not gloating yet. Many of its officers expect fatigue to bring escalation, not a dying away, of the uprising. In Tunis last month Fatah's leaders called for an increase in violence in the occupied territories. Possibly in response, there has been a change in Palestinian tactics on the ground. Last week an unarmed Israeli civilian was kidnapped in the West Bank town of Tulkarm (he was freed soon afterwards by the army). A few days before that four Israeli tax collectors were attacked with petrol bombs in the centre of Ramallah. Shots were fired at an army position in Nablus. The once-clear definition of the *intifada* as a Palestinian "war of stones" but not of bullets has blurred as younger and wilder activists take the place of those under arrest.

The *intifada* still enjoys wide support. But the momentum of the political strides made by the PLO—its dialogue with the United States and the recognition by scores of countries of Mr Yasser Arafat's phantom

Palestine—is slowing down. Mr Arafat says increasingly often that he is losing patience with American mediation. Meanwhile, in the ten days before August 29th, at least 15 Palestinians were killed by Israeli army gunfire; several others died in what have now become routine attacks by Palestinians on fellow-Palestinians accused of collaborating with the Israelis. The sacrifices of the *intifada* continue, but the gains are fewer than they were.

## World Bank

# Greener faces for its greenbacks



WHEN delegates arrive at the annual meeting of the World Bank in Washington, DC, later this month, they will have to push their way through a crowd of demonstrators clamouring for green issues to be taken more seriously. Once inside the doors of the Sheraton Park Hotel, they will be waylaid by posses of lobbyists on issues as far-flung as population resettlement in Indonesia and dams in India. The World Bank has become the main target of charities and other organisations worried about the damage development can inflict on the environment.

The Bank's response has been to try to green itself. The development committee, on which finance ministers from member countries have twice-yearly talks about the main aspects of the Bank's policy, has already published two papers on links between development and the environment. A third was being discussed this week by the Bank's board of directors. It claims that some progress has been made in attaching environmental safeguards to loans for specific projects, such as dams or roads; but much less has yet been done to make sure that the environment is properly considered when the Bank lends money for countries to make general economic reforms.

The Bank began to treat the environment more seriously in 1987. The reorganisation that took place then led to the setting up of an environment department. Previously green issues had been the responsibility of a handful of staff members, too junior to have much influence. Early in 1988 the Bank acquired its first environment director, Mr Kenneth Piddington, a New Zealander. The department now does some research, and has a group attached to each of the four main regions into which the Bank divides the world, with the job of reviewing loan proposals at an early stage.

The new department is still finding its feet. The environment brings the Bank un-

familiar problems. Some of these are discussed in the latest paper for the development committee:

- The Bank tends to assess the value of a project by weighing up its costs and benefits in cash terms. This creates a built-in bias against the environment. Even though plenty of Bank projects—in education and health, for instance—are equally hard to value, the Bank's staff still tend to use rigid cost-benefit tests. A big breakthrough here will be new guidelines on how the environmental impact of a project should be assessed, which will be routinely applied to most new loans from now on.

- It may be easier to spot the environmental side-effects of a loan for a particular project than one for general economic adjustment. In the past, for instance, the Bank has encouraged countries to chop down their forests in order to boost their export earnings. One way to discourage such myopia is to treat natural assets like man-made capital in national accounts. Early drafts of the committee paper called for all country economic reports to show, within three years, how environmental damage would affect a country's growth and creditworthiness. That ambitious target has now been replaced by a vaguer commitment.

- Third-world countries will increasingly be asked to follow policies whose benefits mainly show up outside their borders—by conserving rare species, or cutting emissions of carbon dioxide into the atmosphere, for instance. The Bank is already under attack from the green lobby for lending money to help developing countries build more coal-fired power stations, which may add to the risk of global warming. Subsidised loans, it argues, may be needed to persuade poor countries to take an altruistic view.

- Protecting the environment raises awkward political points. "Environmental problems, by their nature, typically involve conflict of interest," says the development committee's paper. "The upstream polluter damages downstream fisheries; mining or logging operations threaten indigenous tribes; urgent present-day needs threaten future generations. In most cases, the powerful damage the weak." The Bank's only weapon in such cases is to impose "green conditionality" on loans. That annoys developing countries, which feel that their sovereignty is threatened, and often fails. The environmental conditions the Bank tried to attach to a large loan to Brazil for a project in Amazonia were largely ignored once the money was handed over.

- The Bank now realises the need to work more closely with unofficial organisations, especially those in borrowing countries. A special effort will be made at the annual meeting to brief them on Bank policy. And a new fund has been set up, paid for by the Japanese, to help them prepare projects for the Bank to support. Once again the Bank

risks offending developing countries, some of which feel that lobbyists should keep their noses out of Bank policies.

Bank officials worry that, if the Bank avoids all lending projects that are likely to have bad environmental effects, borrowers may turn to other, less squeamish lenders. It might be better, they argue, for the Bank to become involved in such projects so that it can then use its influence to minimise the harm they do. A greater danger may simply be the pressure on the Bank to keep on lending money.

The cure for environmental damage is sometimes not more money, but less: for instance, stopping deforestation in Brazil is more likely to be advanced by ending subsidies to electricity generation than by subsidising more dams. The Bank's role as a compulsive lender sits uneasily with its new job as custodian of the environment.

## South Africa

# Going to the country—abroad

FOR a man with an election on his hands at home, South Africa's provisional president, Mr F.W. de Klerk, has spent an awful lot of time talking to foreigners. On August 25th he went to Zaire to see President Mobutu Sese Seko. Within a week he had chatted with President Kenneth Kaunda of Zambia and General Patrick Lekhanya of Lesotho. In July, as leader of the National party but before he took over the presidency, he had met Mr Joaquim Chissano of Mozambique; last week he held a meeting in Pretoria with Mr Jonas Savimbi, Angola's leading anti-Marxist rebel.

So what is Mr de Klerk up to? First, no doubt, he wishes to put his own mark on the country whose government he took over on August 15th, and which he hopes to be elected to rule on September 6th. Second, he wants peace for the region, after the years of turmoil that his country has done so much to foster. Third, he wants to establish himself as a man for negotiation, not confrontation. He seems to realise that, if South Africa goes on bashing both its domestic critics and its black-ruled neighbours, it will lose the vestiges of western sympathy that it will need in the hard economic times ahead.

Taking charge is important for Mr de Klerk, if only because he succeeds the bullying Mr P.W. Botha, who dominated his cabinet more by force of personality than of argument, and who resigned in a fury because Mr de Klerk announced his appointment with Mr Kaunda without asking the old chief's leave. South Africans tend to admire

## Chasing the brown vote

FROM OUR SOUTH AFRICA CORRESPONDENT

IT IS too easy to forget that white people are not the only ones voting in South Africa's general election. Most South Africans, it is true, have no vote to cast on September 6th, because most South Africans are black. But the election will nevertheless be the first in which Coloured (mixed-race) and Indian South Africans will have a chance to vote on the same day as whites for their own separate chambers of Parliament.

Black people campaigned tumultuously against the constitutional reforms that created this tricameral parliament. Brown people who were lucky enough to get a vote proved equally unenthusiastic. Only 30% of Coloured voters and 20% of Indians bothered to take part in the first elections to the new chambers in 1984. This time, too, many will stay away. But the two chambers, although subordinate to the white one in most matters, are not completely powerless. The timing of the present election proves it.

Ex-President P.W. Botha, who until his stroke in mid-January wielded enormous power, wanted to postpone the election until 1992. To do so he needed to change the constitution he had himself devised. To do that he needed the consent of all three houses. Mr Allan Hendrickse, leader of the majority Labour party in the Coloured house, demanded a price for his assent: he asked Mr Botha to scrap the Group Areas Act, the law providing for compulsory residential segregation. Because Mr Botha was unwilling to pay that price, he was compelled to call the election more than two years earlier than he



Insider Hendrickse

would have liked.

Mr Hendrickse's manoeuvres on that occasion may encourage a larger number of Coloured people to take next week's voting seriously. But even if the turnout is low, another victory for his own party looks certain. In 1984 Labour won 76 out of 80 seats. Mr Hendrickse's popularity has grown since 1987 when, as a member of Mr Botha's cabinet, he defied the president by diving into "God's own sea" from a beach set aside for whites only. This mutiny got him sacked from the cabinet, but saved his political career by showing that he was not just the servile tool of a white president.

The Labour party now campaigns on a

promise to fight for the immediate abolition of apartheid's three main legislative pillars: the Group Areas Act, the Population Registration Act (which classifies South Africans by race) and the Separate Amenities Act (which authorises the reservation of public facilities for exclusive use by one race).

Mr Hendrickse has worked hard to persuade fellow South Africans that it is possible to dismantle apartheid from within. The Indian chamber, in contrast, is widely reviled. Much of the blame lies with the many scandals attached to Mr Amichand Rajbansi, leader of the once biggest party, the National People's party, and the first Indian to be appointed to the cabinet. Like Mr Hendrickse, he lost his job in it—but that was after a judicial inquiry into allegations of irregularities in the House of Delegates. The inquiry judge called Mr Rajbansi a "mean-minded bully" and recommended that he should be excluded from any official post which calls for integrity.

Does the vote for the brown chambers matter? Their power to obstruct constitutional change could become more important after the election. All three main white parties—the ruling National party and, on its right and left respectively, the opposition Conservative and Democratic parties—say they intend to change the constitution. The Nationalists and Democrats plan in their different ways to include black people in central government; the Conservatives want to partition the country and establish parliaments for each of the main races. In principle, any constitutional amendment must be approved by all three houses, voting separately. Still, for most South Africans, the brown contests are a sideshow.

## ACCOUNTING CASE WRITING COMPETITION

May 28 & 29, 1990  
Banff Centre, Banff, Alberta

Sponsored by:  
The Faculty of Management and the  
Accounting Education Resource Centre

There is no limitation on subject matter for cases. Preference will be given to cases that relate to the theme of small business and entrepreneurship. Cases should give prominence to concerns that are universal in nature.

Faculty, students and practitioners are eligible. Finalists will be invited, all expenses paid, to the final adjudication by the panel of judges. All accepted cases will be published and royalties will be paid on usual trade terms.

**Intention to compete must be indicated prior to November 1, 1989. Cases must be submitted prior to March 1, 1990. Finalists will be invited to attend the workshop prior to April 15, 1990.**

For more information, phone or write: Dr Eldon Gardner, Coordinator, Accounting Education Resource Centre, Faculty of Management, The University of Lethbridge, 4401 University Drive, Lethbridge, Alberta, Canada, T1K 3M4. Phone (403) 329-2630 or 329-2726. Fax (403) 329 2022.

**Awards: 1st Prize US\$5,000; 2nd Prize US\$1,500; US\$500 for each of the other finalists: US\$1,500 for the best presentation at the finals.**

*We gratefully acknowledge the financial support of the Accounting Education Foundation of Alberta and the Burns Foods Endowment Fund*

# INTERNATIONAL TEXTILE OUTLOOK KINTNER

**ESSENTIAL BUSINESS AND MARKET ANALYSIS FOR THE WORLD'S FIBRE AND APPAREL INDUSTRIES**

A year's subscription will bring you reports on:

- Profiles of the world's major textile companies
- Locations of current and future investment
- Consumer market research data
- Regional Analyses

The latest issue includes:

- ▶ Profile of the Textile and Clothing Industry in Pakistan
- ▶ World Textile Trade and Production Trends
- ▶ The EC's Strategy in Textiles and Clothing for 1992 and Beyond
- ▶ Profiles of Leading West German Textile Companies
- ▶ The World Market for Silk Products

**Subscribe now! Your competitors in over 50 countries are already doing so!**  
The Economist Intelligence Unit Limited, 40 Duke Street, London W1A 1DW

Please enter an annual subscription (6 issues) to Textile Outlook International.  
Price including postage (airmail outside the UK):

UK £265  Europe £270  North America US\$513  Rest of World £282

I enclose a cheque for £/US\$ \_\_\_\_\_ to The Economist Intelligence Unit Ltd

Please invoice me

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

**The Economist Intelligence Unit** 40 Duke Street EXLA  
London W1A 1DW  
Telephone: (01) 493 6711 Telex: 266353

215 Park Avenue South, New York, NY 10003, USA. Tel: (212) 460-0600 Telex: 175567

A division of Business International  
Reg. office: 25 St James's Street, London SW1A 1HG. Regd. in London No. 1782617

## Flowers and Fragrance Flight Rajanigandha Class

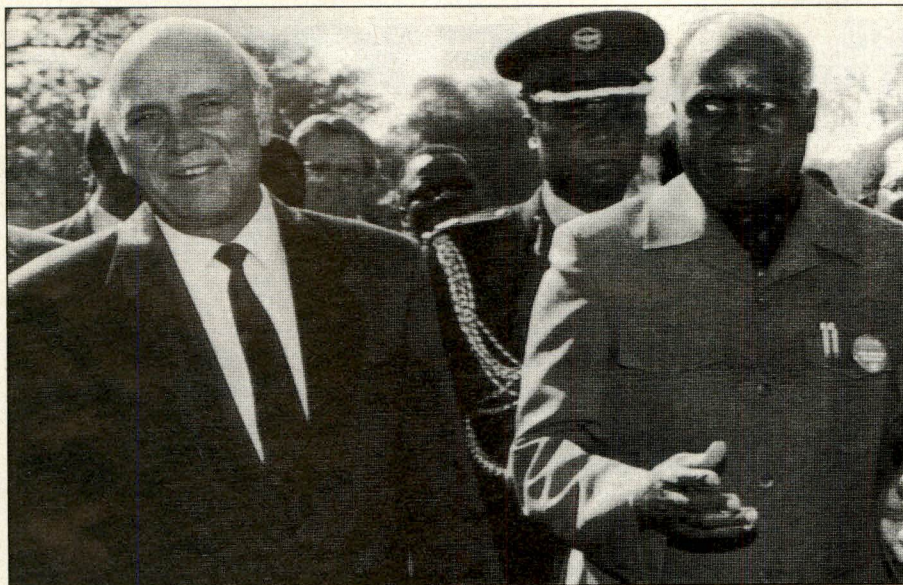
Welcome flowers.

The fragranced atmosphere of care in the air.  
Soft refined grace of the stewardesses.  
Food and mood of Bengali aristocracy.  
On board. Biman's Rajanigandha Class  
(Executive Class).

*The friendly fragrance  
of our flight lingers on.*



Rajanigandha Class



When de Klerk met Kaunda, nobody mentioned the ANC

decisiveness; it would probably help Mr de Klerk, whatever the decision was.

Regional peace, or at least less outside intervention in the region's internal wars, has been coming since the Americans, with Soviet agreement, arranged for the Cubans to get out of Angola. The South Africans have wanted weak neighbours, and have helped weaken them by stirring up home-grown antagonisms. But that has had a price. In Angola the Cubans gave South Africa's soldiers a bloody nose in late 1987.

Mr de Klerk now seems to want to stop subverting the region. That is easier said than done. The American-sponsored peace deal omitted to provide for the main rebel organisation, UNITA, whose leader, Mr Savimbi, benefits from popular support in his own tribal areas; he has private backers (and diamond mines) as well as the South African and American paymasters who have helped run his show. He now complains he is being left out of the peace deal, and threatens to start fighting again. His supplies arrive through Zaire, so Mr Mobutu holds the key to Mr Savimbi's future.

Negotiation abroad should logically be followed by negotiation at home. The Organisation of African Unity wants Mr de Klerk to negotiate with the African National Congress, whose leaders are in exile because black men trying to exercise political leadership inside South Africa are promptly locked up. Mr de Klerk declines to talk to the ANC until it renounces violence. Mr Kaunda (who is rapidly losing his grip on reality) did not challenge his visitor on this point during this week's unexpectedly cheerful meeting in Livingstone, thereby helping Mr de Klerk to score a point over his Conservative critics at home.

The real novelty of Mr de Klerk's election campaign is that, under him, the National party has given up groping further to

its right for votes, and is seeking to pick up support from relatively moderate and English-speaking white people. The assumption is that they are fed up with the footling racial divisiveness of the constitution Mr Botha invented, and would prefer one that gives the blacks a say—not, to be sure, a decisive say—in the way the country is run.

By talking to foreign blacks Mr de Klerk hopes to encourage these people; by sending his police dogs against domestic blacks, he hopes to reassure them. That may be enough to get him the outright majority he sorely needs. Then his choice will be plain: to talk to the people he refuses to talk to, or to slump back into the dead end that Mr Botha's signposts led to. Talking to the ANC would mean breaking his election pledge. He would not be the first ambitious politician to do that, for the good of his country.

## Kenya

# Bandit country

FROM OUR EAST AFRICA CORRESPONDENT

ONCE they called it the Northern Frontier District, a name with intimations of badlands, bandits and utter loneliness. Most of it is now in Kenya's North-Eastern Province, which lacks that ring of wildness. But the bandits have not gone away. The *shifta* are wandering bands of armed Somalis, from one side or the other of the Somalia-Kenya border. They were put down, with difficulty, by Kenyan troops and policemen in an undeclared war in the 1960s. Now they are on the rampage again.

The Kenyans blamed the *shifta* war of the 1960s on the then Somali government, which dreamed of recovering a "lost" province of Somali-speakers, divided by a colo-

nial arrangement between Italy and Britain. Somalia's ambitions remain, roughly, half the reason for the area's insecurity. When President Siad Barre became Somalia's leader in 1969, he decided to be less vigorously irredentist than his predecessors and withdrew support from the insurgents. But the elderly Mr Barre, once the master of clan politics, may now be losing control of his own country. Clan-based war in northern Somalia has spun off smaller clan-based insurgencies along the Kenyan border to the south.

This spells trouble for Kenya. So does dissent in the Somali army, some of whose soldiers desert rather than pursue fratricidal conflicts in the north. After the disastrous droughts of the mid-1980s, fighting has broken up villages, leaving young men without cattle or safe areas on which to graze them. The result is free-roaming bands of bush-wise *shifta* brigands.

The typical band is led by a few ex-soldiers, with a handful of automatic rifles stolen from the army or bought on a black market that is kept well stocked by East Africa's dreary succession of wars. Rounding out the group are porters and hangers-on, jobless youths from the disrupted villages. The bandits need to eat, so they attack country buses and extort food and shelter from the local people. They also know that there is money in ivory, and that an automatic rifle can bring down, with little risk to the user, tusk-bearing bulls and cows.

Highway robbery is a local problem; dead elephants interest foreigners. Tourism is Kenya's main earner of foreign exchange, and tourists like to see elephants. To end the poaching, the government has launched a military-style campaign in the game-parks, with extra foot patrols, air surveillance, and automatic weapons for the game-wardens, to match those of the *shifta*. The Kenyans say their losses by poaching have dropped from three elephants a day to three over the past two months. The newly invigorated security forces have killed two dozen or more bandits. The unintended result is a plague of hungry *shifta*, pushed from their normal havens in the game-parks to prey upon the nearest settlements.

Pressure and dislocation make the bandits more dangerous than usual, even to foreigners without armed escorts. Since early July three tourists have been murdered in or near game parks. Last month a famous naturalist, George Adamson (about whose life among the lions a romantic film was made), was murdered when he interrupted a *shifta* robbery. The Kenyan authorities are probably winning, but they still have a way to go. They think they are up against only 100 or 200 bandits, in an area larger than Britain. They are determined to hunt them down, even though the hunt may take time. Peace across the border in Somalia would help.

# EUROPE

## If two Germanies became one

Fifty years ago this week, Hitler invaded Poland in an effort to create Greater Germany. The war he thus provoked in the end left Germany split in two. Now, thanks to Mr Gorbachev, a reunited Germany is no longer entirely unimaginable. Our Bonn correspondent imagines it

THE poet Heinrich Heine once moaned that thinking about Germany kept him awake at night. A lot of people give a quiver when they think of a reunited Germany even in the daytime. Bad enough, they muse, to be faced with a new (or at least newly born) military and economic power in central Europe. But imagine what a united sporting Germany would mean: not just Becker and Graf dominating Wimbledon, but all-German athletes tiresomely taking more Olympic medals than anyone else.

The Berlin wall is not about to come down, nor just yet will the "entire German people" get a free vote on unity, as the preamble to the West German constitution demands (although thousands of East Germans are voting with their feet and nipping round the Berlin wall by way of Hungary). But suppose it did happen. After all, the western allies keep saying they favour German unity, and in Bonn in June Mr Gorbachev signed a declaration backing the rights of peoples to self-determination. If the Germanies got together again, what might the new colossus look like?

Stick together the Federal Republic of Germany and the German Democratic Republic and you have a state with 78m people, more than 660,000 of them under arms, and a GDP of close to \$1.4 trillion, about half that of Japan. That is a pretty daunting thought for neighbours like the Poles—even leaving aside the debate which has just blown up in West Germany again about the true validity of Poland's western frontier along the Oder-Neisse.

The crude statistics mislead, of course. They overstate the military manpower of a united Germany, which could presumably come about (if at all) only after deep cuts in all European armed forces, including German ones. But they understate a new Germany's likely economic clout. Less cash going for arms would mean more for the civilian economy—a particular boon for East Germany, which spends more than 6% of its GDP on defence, roughly double the West German share. More important, if

17m East Germans followed their 61m West German cousins into capitalism (as one imagines most would if allowed to decide for themselves), they could unleash a new German economic miracle.

East Germany is already the star performer of Eastern Europe (admittedly a dim galaxy) and among the world's top score of industrial states. It has managed that in spite of being cut off from vital parts of pre-1945 German industry; despite massive industrial dismantling by the Russians; and in the teeth of an inflexible, centrally planned system which only these Germans have managed to make some sense of. Ask East German managers how they pull it off and you get a Prussian answer (along with a few snide remarks about Russians and Poles who fail to do as well): "With discipline, hard work and tradition."

Give such bosses the boost of true competition and profits, and the country's 9m workers the chance of earning some real money, and watch East Germany boom. Think of the scope for mergers between top-rank German firms—for example, in electronics between Siemens and Carl Zeiss Jena. Imagine what Daimler-Benz could do to transform the East German vehicle industry: 200 of Daimler's senior managers took themselves across the border for a meeting in Dresden last autumn, so they presumably have some East German business in (albeit distant) view. Not that most East Germans could expect to purr about in Daimler's luxury Mercedes saloons; ownership of nippy Volkswagens would be a more realistic aim.

East Germany would first have a lot of catching-up to do. It would need many billions of D-marks to help it replace its often shoddy plant and machinery; to renovate tens of thousands of blackened, tottering dwellings; to revamp a road system where even autobahns are sometimes rutted like ploughed fields; to build new hotels which might tempt West Ger-



mans (the world's biggest spenders on foreign holidays) to dole out more cash for vacations "at home". Where would the money come from?

The West Germans are already ploughing more than DM5 billion (\$2.6 billion) a year into East Germany to improve communications, curb pollution and buy freedom for political prisoners, or as gifts to friends and relations. They are also, from this month, linking East Germany into the West German electric grid, to help prevent winter power cuts. Might they add a West German "Marshall plan" for their fellow-Germans, flanked with generous credit support from their banks? The top banks certainly have the right names. The biggest, with 1,500 branches worldwide (though none in East Germany so far), is called the Deutsche, not the Westdeutsche; the second biggest is the Dresdner, founded in Dresden in 1872.

It would not be a one-way street. West German workers are not exactly slothful but they would have to buck up if skilled labour from the East brought extra job competition. That could cause friction and hous-

ing problems for a time: witness the present difficulties because of a surge of ethnic German immigrants from Eastern Europe and the Soviet Union. But in the decade or so after the second world war West Germany not only managed to absorb more than 12m refugees from the East but did very well out their hard work and inventiveness. That goes especially for the southern states of Bavaria and Baden-Württemberg, mainly farming areas after the war but now booming centres of high technology and relatively low unemployment.

The mordant wit of the good East German satirical cabarets—like Pfeffermühle in Leipzig and Distel in Berlin—might rub off on the stodgier West German ones (unless, that is, the absence of a ruling Communist party removed the spark which gives East German cabaret its fire). The Berlin Philharmonic, without peer in West Germany, would have to battle harder for the top title in a united Germany against two worthy rivals, the Dresdner Staatskapelle and the Leipzig Gewandhaus Orchestra.

All pie in the sky? Maybe. Plenty of peo-

ple agree with the French remark that Germany is so splendid it is better to have two. Some westerners even profess an odd affection for East Germany (not normally shared by the people who have to live there) and would be sad to see it go—despite the tincan cars, the reek of low-octane fuel, the scratchy, greyish lavatory paper, the non-lather soap and the tortuous prose of the party newspaper *Neues Deutschland*, eternally presenting a never-never world of over-fulfilled quotas in "real existing socialism".

Then there is the obstacle of Mr Erich Honecker, old and ill but still East Germany's leader, who says German unity is as likely as a marriage between fire and water. But in the 1950s Mr Honecker's predecessor, Walter Ulbricht, was telling party colleagues that "we are for the unity of Germany because the Germans in the west of our homeland are our brothers, because we love our fatherland." Clearly, even those with the doctrine of historical inevitability on their side are able to change their minds. If once, why not again?

## Missed opportunity

FROM OUR BONN CORRESPONDENT

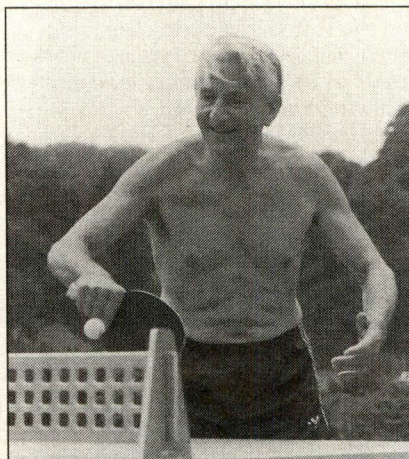
IT WAS a bad day for West Germany's president, Mr Richard von Weizsäcker, not to be in Poland. A visit there on September 1st, the 50th anniversary of the German invasion, would have shown Germany's will to make a new start in a long-troubled relationship. Instead both Mr von Weizsäcker and the chancellor, Mr Helmut Kohl, stayed at home, their praise for Poland's new democratic course mingling uneasily with demands by the far-right parties for a reunited Germany, one that would include parts of what is now Poland.

West Germany had intended to tie up an aid package for the Poles in time for Mr Kohl to visit Warsaw this summer. Mr von Weizsäcker was to have followed on September 1st with a statesmanlike speech reflecting on the unhappy Polish-German past and offering hope for the future. It is the sort of thing the president is good at. Something, perhaps, to rival that memorable gesture by a former chancellor, Mr Willy Brandt, who fell on his knees before the memorial to victims of the Warsaw ghetto.

West Germany is Poland's biggest trade partner in the West. It was quick to promise help in support of new reforms. Officials worry that, if the reform movement in Poland collapses, it will set back *perestroika* for years throughout Eastern Europe—including in East Germany, where reforms have hardly begun. Yet Mr

Kohl does not now expect to make his Warsaw trip much before the end of November, well after British, French and American leaders.

Aid negotiations took longer than expected, because the Poles at first wanted more than the West Germans thought it prudent to give (and because Mr Kohl insisted that he should control at least this area of foreign policy, to the exclusion of his voracious foreign minister, Mr Hans-Dietrich Genscher). There is also the tricky issue of improving conditions for people of German ancestry living in Poland. Since 1970 more than 600,000 of these "ethnic Germans" have come to



Von Weizsäcker's spin goes wasted

West Germany, 140,000 of them last year alone. Mr Kohl's government thinks Poland could help cut the loss this outflow entails for the Polish economy by giving Germans in Poland more of a chance to promote their own culture.

But conservatives in Mr Kohl's coalition, especially in the Bavarian Christian Social Union, are not keen on speedy and generous aid to Poland anyway. They fear it will lose them more votes to the Republicans, the new party of the far right which is gathering support at the polls by playing to "Germany first" sentiment and to worries about the numbers of refugees pouring into West Germany.

In a bid to outflank the Republicans, the Bavarian leader, Mr Theo Waigel, has stirred up a row over the Polish-German border. He argues that, since no peace treaty was ever signed between Germany and the wartime allies settling new frontiers, the German Reich continues to exist within its 1937 borders—in other words, including parts of Poland, such as Silesia, which had been mainly German for centuries but were lost when Hitler's armies were defeated in 1945.

Technically Mr Waigel has a point. But in 1970 West Germany signed a treaty with Poland in which it pledged that it has no territorial claims on Poland "now or in future". Mr von Weizsäcker repeated that this week in a message to Poland's president, General Wojciech Jaruzelski, to howls from the Republicans that he was selling Germany short. It made a sad substitute for what was meant to be a historic occasion.

## Auschwitz

## Lead us not into Glemptation

THE entry of Poland's Roman Catholic primate, Cardinal Jozef Glemp, into the row over the Carmelite convent at Auschwitz has outraged Jews and embarrassed many of the cardinal's fellow Catholics. The controversy had been fraying nerves since July, when Jews organised protests against the continued presence of the convent. Then, in a sermon on August 26th, Cardinal Glemp's temper seemed to snap.

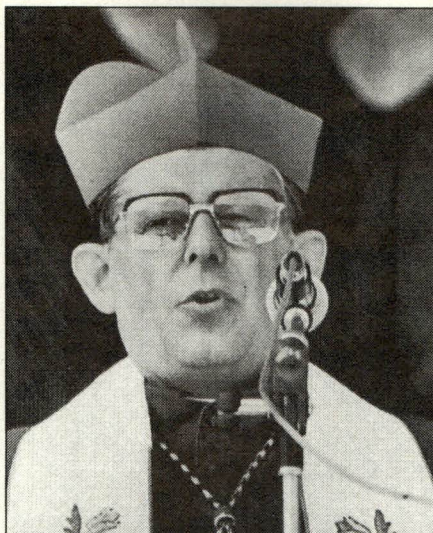
Dear Jews, do not talk with us from the position of a nation raised beyond all others and do not dictate terms that are impossible to fulfil. Don't you see, esteemed Jews, that openly opposing the Carmelite nuns hurts the feelings of all Poles and violates our hard-won sovereignty. Your power is in the mass media, at your immediate disposal in many countries. Do not use it to spread anti-Polonism...

Let us distinguish Oswiecim-Auschwitz, where mainly Poles and other peoples perished, from Brzezinka-Birkenau, a few kilometres away, where mainly Jews were murdered... If there is no anti-Polonism there will be no anti-Semitism here.

Cardinal Decourtray, the archbishop of Lyons, defended the Polish primate against charges of anti-Semitism. The French cardinal led the Catholic delegation which, in 1987, agreed to the removal of the convent from Auschwitz—an undertaking still not honoured by the Polish church. He insists that the agreement still stands, though Cardinal Macharski, the archbishop of Cracow, in whose diocese Auschwitz lies, had said on August 10th that it had been "suspended" because of the "aggressive atmosphere" created by "some Jewish groups".

But Cardinal Glemp got a stinging rebuke from his own flock. On August 28th *Gazeta Wyborcza*, Solidarity's daily paper, expressed "pain and regret" at the deep hurt the cardinal's words could cause to the families of the Jewish victims of the Holocaust. Nobody should doubt the piety and the goodwill of the Carmelite nuns, the Solidarity paper said. But there should be no doubting the genuineness of Jewish feelings. Nor should Jewish protests be seen mainly in terms of press manipulation.

On August 26th, the day of Cardinal Glemp's sermon, the Polish Pope published two documents on the 50th anniversary of the start of second world war. In these he passionately condemned anti-Semitism. Will he now work behind the scenes for a quick solution to the nasty Auschwitz dispute? One offer, floated before the Glemp intervention, was to build an alternative convent quickly with the help of money from West German Catholic bishops. A more imaginative idea came on August 30th



Glemp bares his feelings

from the Italian prime minister, Mr Giulio Andreotti, who has close links with the Vatican. He suggested that the convent be moved to the uncontroversial site of another Nazi massacre in Rome.

## Poland

## Shock therapy

FROM OUR WARSAW CORRESPONDENT

IS A "controllable shock" what Poland needs to cure its economic illness? A young economist from Harvard University, Mr Jeffrey Sachs, thinks so, and he is telling Poland's new Solidarity leadership how the shock therapy—something akin to the Erhard reforms that laid the groundwork for West Germany's postwar economic miracle—should be administered.



Solidarity plus Sachs equals sausage?

Mr Sachs's programme, devised with another American economist, Mr David Lipton, calls for a sudden leap to a market economy through a strong clamp on the money supply, the elimination of subsidies and price controls and the relaxation of foreign-trade regulations—including the introduction of full convertibility for the zloty. The West would have to help by agreeing to a suspension of debt payments and by pouring in capital. According to Mr Sachs, western money would come once investors and leaders alike were convinced that something was really changing in Poland. Mr George Soros, the Hungarian-born entrepreneur who sponsors Mr Sachs's trips to Warsaw, calls this idea the "Big Bang" theory of economic transformation. The question is whether it would create a new universe or simply destroy the old one.

Mr Sachs says he can promise chaos for six months, improvement within a year, and full integration into the European economy within ten years. Impossible? Mr Sachs has reason to believe in miracles. He served as an adviser to the Bolivian government, where his prescriptions helped reduce inflation from 40,000% to 15% in a matter of months. The reduction of Bolivia's budget deficit was the key to success, and so could it be in Poland, where the deficit has quintupled since last year.

Solidarity's economists and politicians are taking the idea of radical change seriously enough to run frequent articles on the "Sachs plan" in Solidarity's press, and to introduce Mr Sachs to the new prime minister, Mr Tadeusz Mazowiecki. While he still has no formal link with the Polish government, his plan, as one of his Polish backers put it, "is the only game in town", and the only programme comprehensive enough to present to the IMF when Poland is due to make its bid later this month. The critical

issue of quick IMF and World Bank credits, without which other banks will continue to hold back, may depend on the acceptability of new Polish proposals.

Inevitably, Mr Sachs is meeting strong opposition from Solidarity's trade-union traditionalists, and from politicians worried about the social consequences of his proposals. Sceptics point to the wave of strikes that followed the price rises brought about by the sudden "marketisation" of Poland's food economy at the beginning of August. They ask how Poles can be expected to accept the "marketisation" of everything, especially if it is done overnight.

Perhaps they could. Poles may need a psychological shock as much as an economic one, says a leading Polish economist, Mr Alexander Paszynski, to convince them that the new regime really is new. Moreover, the liberal goals of the Sachs plan are not disputed, only the wisdom of proceeding at such speed; yet it can be argued that speed is of the essence. Nobody knows how long Mr Mazowiecki's "honeymoon" will last, nor how long impoverished workers will obey Mr Lech Walesa's pleas not to strike.

At least two big problems remain to be worked out: what happens to "rouble-zone" trading when the zloty becomes convertible, and who will own Poland's outdated factories and mines in its future free-market economy? Bolivia did not have the Soviet Union and Czechoslovakia as its two main trading partners, nor did it have state ownership of over 90% of industry. Plenty more thinking is needed to prepare a Polish "Big Bang". There are economists in Poland and abroad willing to put their minds to it, once Mr Mazowiecki has managed to put together a new government.

### Soviet Union

## Trouble, trouble, trouble

**I**N FAVOUR, 300,000; against, 80,000: the numbers spoke for themselves and no doubt Moldavia's parliament was listening. It was expected this week to bow to the majority, who had massed on August 27th in the central square of Kishinev, the republic's capital, and pass a controversial law making Romanian, rather than Russian, the official language of the republic. By mid-week about 80,000—mostly Russian—workers in Moldavia had downed tools in protest at the prospect. But they, like their equally affronted Russian brethren in the Baltic republics of Estonia, Latvia and Lithuania, seem powerless to slow the nationalist surge that threatens to turn them into strangers in what they had come to believe was their own country.



A punch for Moldavia

From his holiday retreat Mr Mikhail Gorbachev made plain his alarm at the nationalist threat to his reforms. Twice over the weekend he spoke by telephone to Mr Algirdas Brazauskas, the Lithuanian party boss, to tell him that events in Lithuania had now "gone too far". On August 26th, in between the two telephone calls, a grim warning was issued in the name of the Communist party's Central Committee in Moscow to all three Baltic republics: nationalism was leading them towards the "abyss". Speculation that Mr Gorbachev's holiday peace might not have been disturbed for consultations about the harsh wording of the warning was quickly dismissed by Soviet officials.

The Central Committee's fist hit the table only three days after the biggest independence protest ever staged in the Soviet Union. On August 23rd more than 1m people had formed a human chain linking the capitals of the three Baltic republics. They were marking the 50th anniversary of the Hitler-Stalin pact, which gave Stalin a free hand to scoop the Baltic states into the Soviet Union.

Mr Gorbachev singled out Lithuania for special telephone treatment because it has come the closest to declaring itself independent of its masters in Moscow. A special commission of Lithuania's parliament recently declared the republic's incorporation into the Soviet Union in 1940 to be illegal. The Lithuanian Communist party, which has been all but swept aside by the nationalist movement, Sajudis, has said it is considering breaking from Moscow and declaring itself independent (the Komsomol, the Communist youth organisation, has already done so). Lithuania's Communists argue this is the only way they can hope to win seats in local elections later this year.

Party bosses feel themselves caught in a trap of Mr Gorbachev's making. It is his pol-

icy of *glasnost* that has emboldened the nationalists to complain and allowed them to be heard. And his introduction of more competitive elections has forced party members to compete with popular-front candidates for seats.

In Lithuania the party quickly decided that, if it could not beat Sajudis, it had better join the nationalists. In Moldavia the party had been criticised for heavy-handed suppression of smaller demos earlier this year, and now finds itself in disfavour again, this time for letting events slip out of control. Only in the Ukraine has the popular front, set up earlier this year, been stifled by the party. But the methods used—harassment, beatings—are frowned on by the Gorbachev Kremlin.

Mr Gorbachev seems at a loss to know what to do next. It is one thing to rush in troops to keep two warring communities apart, as he was forced to do again this week to prevent more bloodshed between Armenians and Azerbaijanis in the disputed southern region of Nagorno-Karabakh, and as he had done earlier this year in Georgia and in Uzbekistan. But any attempt to use

## Dirty tricks

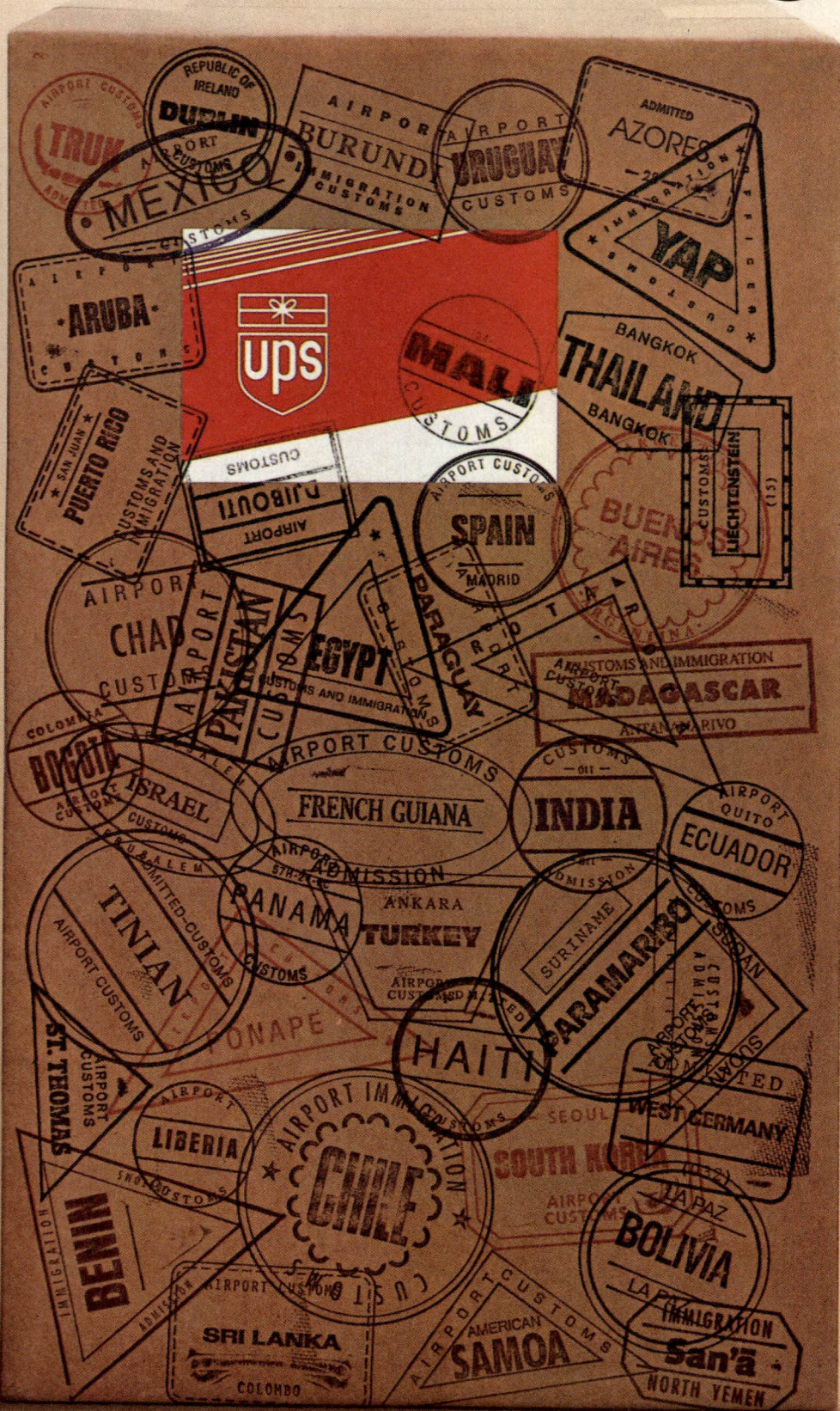
FROM A SPECIAL CORRESPONDENT IN ESTONIA

**A** YOUNG Estonian journalist, Mr Madis Jürgen, wrote a series of articles in an Estonian newspaper this summer about the beating up and sexual abuse of Estonian (and other) recruits serving in the Soviet army in the southern republics of the Soviet Union. The attitude of Soviet officers was summed up by the title of the series: "Shut up and soldier on". It seems that someone may be trying to shut Mr Jürgen up.

The articles led to the trial (in Odessa in August) and conviction of a group of the bullies, who were sentenced to prison. This made the slur on army honour even harder to bear. The three soldiers who were witnesses at the trial were paraded before 1,000 comrades and told they had shamed the army.

On August 29th Mr Jürgen was driving, accompanied by this correspondent and a West German student, on the main road from Tallinn to Leningrad when a back wheel fell off. Luckily, nobody was hurt. An inspection showed that three of the four bolts holding the wheel in place had been removed. Mr Jürgen was in no doubt that this was an attempt to intimidate him, or worse. "Similar tricks have been tried on some of my radical colleagues," he said.

# 175 foreign countries aren't that foreign to us.



In Bangkok, our drivers ride scooters to speed your packages through the worst traffic jams in the Far East.

While in Venice, certain addresses reachable only via canal are served by custom-built UPS gondolas.

No one said it would be easy to build a global delivery system that meets UPS standards for reliability in 175 countries and territories. But that's just what we've done.

With our Electronic Customs Pre-Alert to hurry your delivery across international borders. Computerized tracking along the way. And prices that must make competitors wonder how on earth we do it.

Suffice to say that it's a little bit easier when you know your way around.



**We run the tightest ship in the shipping business.**

Underlying Strength.

Amidst the shifting currents of today's financial markets, Bank of America stands on a solid



Bank of America NT&SA © 1999 BankAmerica Corporation

The Golden Gate Bridge,  
photographed by Alan Ross.

foundation of experience. It enables us to look at  
your goals with a long-range perspective. To see

opportunities that may not be clear to others. And  
to deliver the support you need to seize them.



**Bank of America**



troops against the dignified, self-disciplined revolts now taking place in the Baltic republics and Moldavia could bring an end to his experiments with reform.

Next month Mr Gorbachev will put new proposals to the Central Committee in Moscow that will expand the powers of the republics, but fall short of the sort of autonomy, let alone independence, that the nationalists demand. A strong centre and strong republics is the Gorbachev refrain. He may find that he has pleased nobody, but merely incurred the wrath of party conservatives to add to his problems with the nationalists. He is also offering hostages to fortune. In order to placate national feeling, the party document talks of the "completely voluntary nature" of the union between the republics. Mr Gorbachev has no intention of letting anybody leave voluntarily. But what if they take him at his word?

Holland

Campaign fever

FROM OUR AMSTERDAM CORRESPONDENT

DUTCH election campaigns are as flat as the country itself. The current one is no exception. But the result of the vote on September 6th will be unusually interesting, for two reasons.

One is that it will show how far voters are now prepared to back "green" policies, even if these cost them money. The centre-right coalition led by Mr Ruud Lubbers collapsed last May over the financing of an ambitious national plan to reduce pollution. The second reason to watch Holland is that this election may point to a new Euro-trend: is politics tilting left again after a decade of conservatism?

The opinion polls point to a close race. Mr Lubbers's middle-of-the-road Christian Democrats and their right-wing partners, the Liberals, may well lose their majority in the 150-seat lower house of parliament. The Liberals look likely to suffer for having brought down the government by opposing

Fonetic French

FROM A CORRESPONDENT IN FRANCE

FIFTY years ago Paul Valéry lamented the "oddities" of French spelling, "ignorantly and absurdly frozen by seventeenth-century pedants". Nobody listened to a mere poet. In the 1950s a conference of French-speaking nations called for simpler spelling and a commission of linguists drew up a list of suggestions. Nothing came of it. But the campaign goes on. In a book\* published just in time for the new French school year, Messrs Jacques Leconte and Philippe Cibois invite the Académie Française—France's custodian of linguistic orthodoxy—to support spelling reform and call on the government to turn their proposals into law.

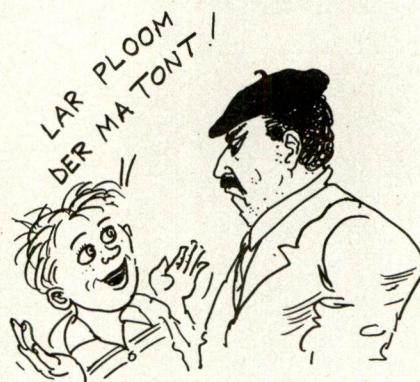
If the authors have their way, President Mitterrand would become Mitèran, since double letters would be abolished and unpronounced ones would go too. There would be no need to worry about those irregular plurals in "x" (as in *plateaux*), which would become regular ones in "s". That phoney Renaissance usurper "ph" would be scrapped and the medieval "f" reinstated: this *révolution filologique* would align French with Spanish, Portuguese and Italian.

Simpler spelling would, the authors claim, make life easier for schoolchildren. Anti-reformers say it would amount to "lowering French to the level of those who can't spell". But Mr Leconte, a former teacher, is backed by the Socialist leadership of the biggest teacher's union (SNI), whose secretary, Mr Jean-Claude Barbarant, has written a postscript to the book. Before it appeared, Mr Leconte had laid out his views on spelling in the union's weekly bulletin, inviting teachers to send in comments: 82% of those who did supported him.

Today's teachers are more relaxed

about spelling than their predecessors, who until the 1970s submitted pupils to daily dictations. Yet many admit that indulgence in the classroom and television in the home have undermined children's grasp of written French. Hence their support for a spelling reform—though the Leconte-Cibois proposals stop short of tackling the grammatical pitfalls of written French, which are a main cause of mistakes.

The authors believe that immigrants



too would benefit from a more phonetic (sorry, fonetic) French: "If our spelling were easier, our language would be assimilated more rapidly by foreigners, especially immigrants and French-speaking Africans." Linguistic neo-colonialism? Maybe, but such condescension can cut both ways. Interviewed earlier this year on French radio, King Hassan of Morocco expressed concern about the future of French. Asked if he was referring to the spread of English throughout the world, he replied scornfully: "Not at all. What appals me is the way people in France speak and write our language."

\*"Que vive l'orthographe!" ("Long live spelling!"), Seuil, 192 pages, FF79.

abolition of a tax break to help pay for the environment plan.

But the opposition Labour party may also drop a seat or two. Some of its supporters are defecting to the Green Left, a new alliance of four left-wing parties (which oddly, however, does not include the Green party itself: bickering has prevented all shades of greenery from merging). Green Left may deprive Mr Wim Kok, the Labour leader, of the chance to become prime minister.

Proportional representation (in the Dutch version, the whole country counts as a single constituency) ensures that no single party is big enough to rule alone. The Chris-

tian Democrats have been in every government since the second world war, and will almost certainly stay in power. The election is largely about who will govern with them. The prospect of coalition talks helps to explain why nearly everyone is so boringly polite during Dutch campaigns.

This time, though, connoisseurs note a subtle shift towards razzmatazz. The Christian Democrats are attempting to tap the prime minister's popularity with the slogan "Further with Lubbers". Even that much personality-pushing is too much for some: Mr Lubbers himself laments that the phrase is "too American".

# The Economist

A SURVEY OF THE ENVIRONMENT

# Costing the earth





# How a company in Brooklyn, U.S.A. has taken the lead in "Eco-Energy"™

The company is Brooklyn Union Gas. We are one of the largest natural gas distributors in North America. In recent years, new "eco-energy" applications have formed an increasing part of our profit growth. Now you may ask, just what is "eco-energy?" It's our word for clean, natural gas energy: the *economic* and *ecologic* alternative to fuels that pollute. As concern for the environment grows, we see the earnings from "eco-energy" applications growing too.

Here are some examples of "eco-energy".

**1. Natural gas powered vehicles.** You probably know that conventionally fueled vehicles are some of the largest sources of air pollution. You may not know that natural gas "eco-energy" powered vehicles are virtually pollution free. As you read this, a private New York bus company, the New York City Department of Sanitation and United Parcel Service are all using vehicles powered by natural gas from Brooklyn Union. Another plus: substantial reductions in maintenance and operating costs.

**2. Cogeneration.** Pollution is just one price paid for the electricity generated by conventional oil

and coal burning plants. There is an alternative: clean, natural gas "eco-energy" generation of electric and thermal energy on site. "Eco-energy" cogeneration plants can also reduce the need for costly conventional electric generation plants. A good number of these practical cogeneration facilities are now in use in our service area. And no wonder: energy cost savings average about 30%.

**3. Waste Disposal.** If there is one thing we in America have too much of—it's garbage. Brooklyn Union's "eco-energy" technology can provide environmentally safe ways of disposing solid and medical waste. And, at the same time, generate lower cost energy.

We can also generate clean gas energy from garbage landfills. In New York City, the location of the world's largest landfill, we produce enough clean energy to heat 10,000 homes a year.

We share our technological "eco-energy" expertise with companies throughout Europe and Asia. Your organization may benefit too. If you would like more information about "eco-energy," or a copy of our annual report, please write: Elwin S. Larson, President and CEO, Brooklyn Union Gas ECO-ENERGY, 195 Montague Street,



Brooklyn, NY 11201.

**Brooklyn Union Gas**

# THE ENVIRONMENT



## The politics of posterity

**"NO GENERATION** has a freehold on this earth. All we have is a life tenancy—with a full repairing lease." That was Margaret Thatcher last year, in the speech that marked her conversion from Iron Lady to Green Goddess. Hard on her heels trod Mikhail Gorbachev, who made the environment a theme of an address to the United Nations; George Bush, who built part of his election campaign round a promise to clean up America; and the EEC Commission, trying to outdo its member governments in greenery. Never have so many politicians seized so quickly on one idea.

They are responding to an extraordinary shift in public opinion, apparent all over the world. In Britain 8,000 people write to the government about deforestation in the Amazon—far more than wrote about starving Ethiopians. In elections to the European Parliament, Greens astonish themselves with their success. In Czechoslovakia Charter 77 urges the government to clean up the environment. A mammoth survey in 14 countries by Louis Harris and Associates for the United Nations finds a widespread belief, in poor and rich countries alike, that the environment has got worse.

Why this passionate interest in so many countries? One answer is growing hostility to nuclear power. The Chernobyl accident woke environmentalism in countries where it slumbered, like France and Japan. More important, people have begun to see the damage done by bad environmental policies. It took last summer's drought to make Americans worry about the greenhouse effect; dying seals to make the British worry about dumping muck in the North Sea; wilting forests to make West Germans

care about acid rain. People protest most about what they can see in their own backyards, and what affects their own lives.

As economic growth has accelerated, and as more countries, with more people, have joined in, so its environmental side-effects have increased. Worse, some of the damage appears irreversible. It is one thing to dump sewage in a river. Clean it up, and the fish usually come back. But losing a species, or a bit of the ozone layer, is altogether more serious. Many people see the environment as an issue of social morality: of each generation's responsibility for leaving its children a better world.

The last time many people fretted about the environment, in the early 1970s, it was the better-off who cared most. Affluent greens were accused (in the neat phrase of Anthony Crosland, a British Labour politician) of wanting to "kick the ladder down behind them." Now, people in poor countries have stopped seeing the issue as something that only the rich could afford to worry about.

With good reason. For the environment is what poor countries live off. Typically, primary production—farming, forestry, fishing, mining—accounts for more than a third of their GNP, more than two-thirds of employment, and over half their export earnings. Their natural resources are their main assets. From them, they must feed a billion more mouths every 13 years. If nature turns sour, poor countries have far more to lose than the rich.

Indeed, the most gruesome environmental horror stories are not from the rich industrial countries. The air is much dirtier in Mexico City than in Los Angeles; in Shenyang than in Dusseldorf. As

*Across the world, the environment is becoming hot politics. Sensible green policies will require people, governments and companies to make immense changes, argues Frances Cairncross, our environment editor*



the poorer countries industrialise, buy cars, get richer, their capacity for damage will overtake that of the rich world—because they have more people. China alone, by burning its dirty coal and making polluting refrigerators, could torpedo everybody else's efforts to stop the build-up of atmospheric carbon and damage to the ozone layer.

**Nature's unpaid bills**

For politicians, who tend to agree with Joseph Addison ("We are always doing something for posterity, but I would fain see posterity do something for us"), the environment presents quite new problems. They will have to co-operate with other countries as never before, including some they would not be seen dead talking to on any other subject. They will have to take decisions on the basis of what they are told by boffins who are even more unintelligible than economists, and show the same alarming tendency to disagree with each other.

Worse, politicians will find that green issues have a way of turning into nasty questions about justice and income distribution. The bits of the planet that have no single owner (the sea, the rain forest, clean air) are the most vulnerable. Only governments have the power to protect them. That may mean stopping powerful citizens (electricity utilities,

cattle ranchers, motorists) from behaving in a way that they regard as their right.

One way to make sure that mankind runs up no more unpaid bills with nature is to get people to pay as they go along: to make sure that the prices of all natural resources, be they clean air or irrigation water, take full account of their long-term scarcity and of the environmental effects of their use. Translate that into hard cash, and what might you get? Water at \$1 a gallon, perhaps, or petrol at \$20 a gallon. Unimaginable? Not if that "full repairing lease" is carried out.

At the moment, humanity is not just failing to carry out repairs; it is actually subsidising the destruction of the building. In every country, the wasteful use of natural resources is deliberately encouraged in some way. Agricultural protection lures farmers into intensive monoculture. Fertiliser subsidies wash out nitrates into the water supply. State-subsidised electricity drives up energy consumption. Ending such subsidies is a matter of commonsense economics. Farm protection hurts consumers, fertiliser subsidies help chemical companies more than farmers, cheap electricity inflates fiscal deficits. Scrap subsidies, and much environmental damage would stop. Consoling? A bit. But since when did governments practise commonsense economics?

**We have been here before**

*Green policies do not always win votes*

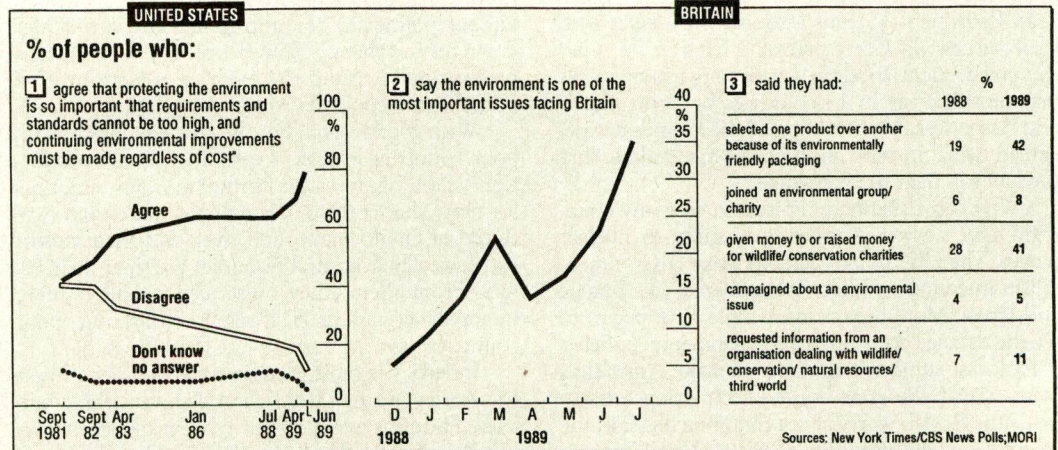
**T**HE last big tide of greenery reached high-water mark back in 1972. That was the year the Club of Rome published a grim account by a team from the Massachusetts Institute of Technology. "If the present growth trends in world population, industrialisation, pollution, food production, and resource depletion continue unchanged," the club concluded, "the limits to growth on this planet will be reached some time within the next 100 years."

Hard on the heels of the exponential gloom of "The Limits to Growth" came Mr Paul Ehrlich's "The Population Bomb", predicting that a quarter of mankind would starve to death between 1973 and 1983; and E.F.Schumacher's vision of a world where "Small is Beautiful". In 1972 the world's first nationwide Green party was founded, in New Zealand; in that year, too, senior government ministers

sat through interminable sessions of the Stockholm conference on the environment.

Then the excitement faded. A decade slipped away in which the problems that scared the Club of Rome—the population explosion, the accumulation of toxic wastes and pesticides, atmospheric pollution, land erosion—were largely forgotten. What happened?

One answer—important to bear in mind in reading all the glum guesses in this survey—is that the early scares were wrong. The Club of Rome was wrong to predict the imminent exhaustion of raw materials. A year after "The Limits to Growth" was published, the oil price had quadrupled. Suddenly it was worth sucking oil out of the North Sea. A year after "The Population Bomb" appeared, the world's birth rate at last began to rise more slowly.



Predictions of disaster that rely on extrapolating past trends are usually wrong.

It may be, too, that the anti-growth attitude of 1970s environmentalism helped to destroy it. Plenty of greens still argue that economic growth is ultimately the enemy of the environment. Others take the more sanguine line developed in "Our Common Future", the report of a commission under Mrs Gro Harlem Brundtland, the Norwegian prime minister. Published in 1987, the Brundtland report emphasised "sustainable development" which it defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Growth will be sustainable only if it is environmentally sound.

At the same time, the base of support for greenery has broadened. By and large, it runs across income levels and age gaps, though it has been more attractive to women than men. One sign of growing greenery has been the rising membership of green voluntary organisations. America's Wilderness Society has shot from 40,000 at the start of the 1980s to 320,000; Friends of the Earth has seen its paid-up support in England and Wales more than double in the past year (after falling in the late 1970s); America's Worldwatch Institute used to take one job applicant in 300 but now can pick one from 1,000.

Greenery has infected Eastern Europe and the Soviet Union, too. Some 5,000 people marched against a planned chemical plant in Yerevan, Armenia, in February 1988; between 50,000 and 100,000 people linked hands on the seashore in September 1988 to call attention to the pollution of the Baltic Sea; 600,000 people in Lithuania—17% of the province's population—signed a protest in October 1988 against a nuclear-power plant.

Environmentalism takes different forms in different countries. In some, it marks a new concern with public health, and particularly with possible links between pollution and cancer. In others, it seems to be akin to nationalism, another political movement that crosses traditional boundaries. In Eastern Europe, particularly Hungary and Czechoslovakia, and in the dissident republics of the Soviet Union, it has been one way in which nationalism has been allowed to express itself.

The main impact of environmentalism has been



Paris thinks green thoughts, too

on established parties. Most industrial countries now have a Green party, but it has generally remained small. Only in West Germany has the Green party changed the face of politics. As a recent book\* put it, "Almost without exception, the Green parties are squeamish about power—in their own organisations and in the world around them." Their politics tends to be a mish-mash of eco-feminism, anti-nuclearism, and massive redistribution.

Not surprisingly, most voters prefer to chivy their traditional politicians to take more interest in greenery. The environment is an issue without any obvious political home. In America the most rabidly anti-environmental president for many years (a Republican) has just been succeeded by a committed supporter of green policies (another Republican).

The environment has become a consensual issue, which no politician can be "against". As a result, mainstream politicians may find that being green wins them fewer votes than they had hoped. They will not always find that consumers are their allies, and they will never be able to do enough to satisfy the green lobby. Only as countries start to discuss the means to deal with environmental problems may new political groupings start to emerge.



## Greening economics

ECONOMISTS began thinking about the environment two centuries ago. In those days they called it "land". Thomas Malthus and David Ricardo were both interested in what happened when population growth drove people to cultivate ever more marginal lands. They expected rising rents, diminishing profits and subsistence wages. Neither set much store by technology as a way of raising agricultural productivity, by substituting man-made capital for scarce natural resources.

Like the dismal forecasts of the Club of Rome, the gloomy predictions of these early Victorians fell out of fashion as the world changed. Food and raw materials poured into nineteenth-century Europe from the new colonies by rail and steamship, en-

couraging late Victorian economists like Alfred Marshall virtually to ignore natural resources, and to concentrate instead on labour and capital.

The natural resources which now mainly concern environmental economists are not coal, timber or fish. As the next part of this survey shows, some of the resources which have become scarcest are unpolluted air, water and soil. The real limits to growth are (a) the capacity of the environment to deal with waste in all its forms, and (b) the threat to resources which play no direct part in world commerce. These "critical" resources—the ozone layer,

*Economists can help governments set green priorities*

\*Green Parties" by Sara Parkin, published by Heretic Books, London 1989.



the carbon cycle, Amazonia—are treated as free goods when in reality they serve the most basic economic function: that of enabling people to survive.

If special care is taken of these, growth can continue. Special care implies righting the present imbalance in price signals—in favour of marketed commodities, and against unpriced natural resources. Markets alone will not solve all environmental problems. In some critical areas, getting prices right is a job for government.

The resources most easily degraded are those where ownership is common, or in doubt. Two powerful examples are the disappearance of the rain forests, with their myriad species, and the build-up of carbon in the atmosphere that may cause global warming. So economists believe in the need to help people with an interest in the environment to establish “property rights” to it. That idea, fine in theory, is hard to turn into practice: future generations cast no votes. Besides, privatising the environment is not always the best way to protect it.

Increasingly, economists are not trying to provide politicians with fancy arguments for doing what their electors want anyway, but taking environmental goals as given and looking at economic ways to pursue them. That may set them at loggerheads with the green lobby, which tends to think in absolutes. There is no such thing, say true greens, as

safe pollution. In reality, the costs of abolishing a particular kind of pollution may rise steeply as it diminishes. Economists are apt to ask whether it may be wiser to get rid only of pollution that clearly does harm. Sometimes it may be worth acting in spite of uncertainty (as with global warming); but the greater the uncertainty, the greater the need to be cost-effective.

Governments need a sense of the ratio of costs to environmental benefits so as to order priorities. Voters may worry more about relatively harmless kinds of pollution than about the less obvious but more dangerous ones. The fuss about disposing of nuclear waste is far greater than rows about heavy metals; yet mercury and cadmium may linger in the soil long after nuclear waste has decayed.

One reason for trying to order environmental priorities is that the list of threats is endless. Americans scare themselves silly worrying about radon in their houses, something that few Europeans have even heard of. On World Environment Day in June the United Nations environment programme listed five growing threats: blooms of algae, such as that now swilling on the Adriatic; acid fog (100 times more acidic than acid rain); potential damage caused by biotechnology; the pollution of Antarctica; and the emission of particulates by diesel vehicles. Expect to hear more about these in future.



## Making polluters pay

*How to make the market clean up*

**P**OLLUTION is the usual by-product of economic activity—whether it be acid rain, hazardous waste, oil-spilling tankers or simply discarded beer bottles. Prodded by their voters, governments will increasingly try to get polluters to carry the costs of the dirt they create.

For there is no global rubbish bin. If waste can-

not be dug into the land, it must be tipped into the sea; if it cannot be discharged into the ocean, it must be burned. America, which generates far more municipal waste per head than any other big industrial country, more industrial waste than most and far more toxic waste than all Western Europe, is the first to run into this buffer. More and more cities

make households separate their rubbish for recycling, not to save scarce raw materials but to avoid having to pay huge prices for somewhere to tip the refuse.

In judging the chances of a clean-up, it is worth remembering that pollution of some sorts has got better in some places. Londoners no longer choke on "pea-souper" fogs; the Tiber and Guadalquivir rivers carry twice as much oxygen as 15 years ago; lead emissions in the United States are little more than one-tenth the level of 1975. In the 1970s and early 1980s a combination of slower economic growth and tougher emission controls in the industrial countries led to some striking reductions in air pollution. Several big countries, including the United States, West Germany and Japan, cut emissions of sulphur dioxide.

These examples show that if a country is prepared to devote enough cash and technology to a pollution problem, it can usually clean it up. But it is much easier to find examples of growing dirt, and not just in the rich world. Several third-world cities have filthier air than most western metropolises: Milan and Shenyang come top of the world league for sulphur-dioxide pollution, followed by Tehran, Seoul and Rio de Janeiro; while Shenyang (again), Xian and New Delhi head the list for suspended particulates, grubby grains of airborne chemicals.

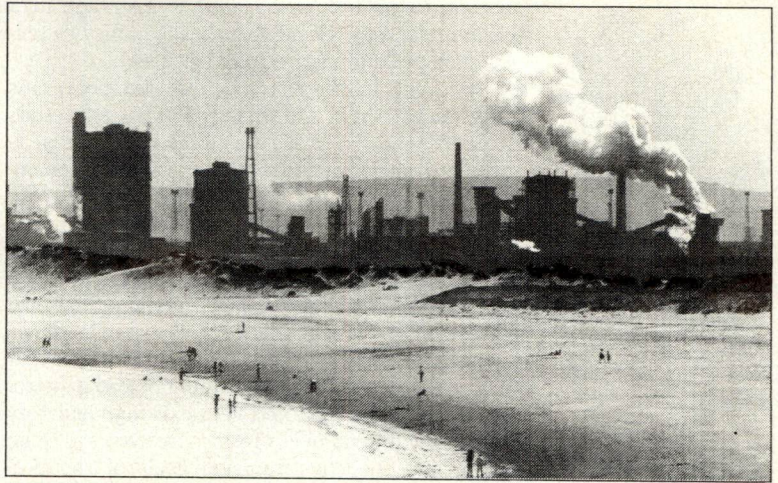
Figures for Eastern Europe and the Soviet Union are harder to come by, but just as unprepossessing. Approximately half of Poland's water is too polluted even for industrial use, 80-90% of its deep wells are polluted, and a quarter of the soil is too contaminated for safe farming. A quarter of Czechoslovakia's rivers support no fish. A third of Bulgaria's forests are damaged or dying.

Most people see pollution as something that directly touches their lives and as being closely linked to public health. The dilemma for governments will be to persuade people that curbing pollution always costs money. It is not just industry that has had a cheap ride from past failures that should be made to carry the costs of pollution; it is also those who buy its products. Cleaner air and water will mean dearer electricity, motoring, eating and shopping.

### How to stop it

The usual way to tackle pollution is by telling people to stop it. "Command and control" is comforting to politicians and people: governments know what they are asking for, people know what they are getting, companies know what they are supposed to deliver. The only people who do not like it are economists. They point out that command-and-control generally delivers less clean-up per penny than more sophisticated alternatives, such as charging polluters for the mess they make, or giving them permits to pollute which they can then sell to others.

Regulations tend to load high costs onto some polluters, low costs onto others. Had Britain decided to force all motorists to convert their cars to run on lead-free petrol, the cost would have been small to the owner of a newish Nissan, but vast to the owner of an elderly jalopy. Regulations also tend to become a floor as well as a ceiling. No polluter has any incentive to discharge even less muck into the local river, say, than the regulations allow; and no entrepreneur has an incentive to devise technology



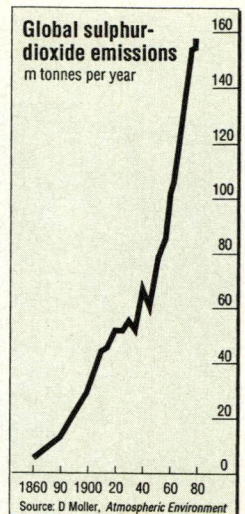
Sea and sky are not free rubbish dumps

that brings down pollution even below the regulation minimum. Command-and-control often means telling polluters what technology they must use to clean up. But government rarely knows best. As regulations are often tougher for new entrants to an industry than for existing firms, they may discourage new investment—even if it is cleaner than the old.

One alternative to "command-and-control" is charging, or imposing a tax or levy. Several European countries have encouraged motorists to switch to unleaded petrol by using tax to make leaded petrol more expensive. Sweden taxes the active ingredients in pesticides and fertilisers. Finland and Norway impose charges on non-returnable containers, Italy on plastic bags, Sweden on batteries containing mercury or cadmium. Many countries impose a charge on lubricant oils, to encourage their recycling. Several, including Japan, Switzerland and West Germany, charge noisy aircraft higher landing fees than quiet ones. And lots of countries charge for water pollution, though frequently at a flat rate. Few charge for air pollution.

In theory, such charges are a way of imposing on polluters the external costs that they otherwise unload onto the environment. Polluters can then decide for themselves how far to meet such charges by changing their behaviour, and by new investment. In practice, as a recent study ("The Application of Economic Instruments for Environmental Protection") by the OECD shows, governments almost always see such charges mainly as an adjunct to regulation, rather than an alternative. Typically, charges are a way to raise revenue to pay for regulators. Moreover, charges are almost always set too low to have much effect on the behaviour of people or companies. Of course, a charge can always be increased, but governments hate having to do that.

So economists have hunted for ways to make regulation work more efficiently. One way is to give companies permits to discharge a limited amount of pollution, and then allow them to trade their permits with each other. That way, governments can set the precise amount of pollution that they are prepared to allow (something they cannot do with taxes or charges) and, by lowering the permits over time, can reduce or even eliminate it. Companies can do precise sums about the relative costs of con-





tinuing to pollute, as opposed to investing in a clean-up; and the cleanest can make money by selling their pollution rights to the grubby.

Although economists love this idea, politicians have rarely tried it, and when they have, the results have been modest. Easily the most successful experiment was carried out by the American Environmental Protection Agency (EPA) when it gave oil refineries two years in which to cut the allowable lead content of petrol. Refineries got quotas of lead, which they could trade with each other. The effect was to let them phase in the cut in lead at their own pace. Half of all the refineries took part in trading.

The lead scheme had three special features that helped to make it work: the amount of lead in petrol could easily be monitored with existing regulatory machinery; the number of firms involved was quite small; and the environmental goals of the programme were clear and widely accepted. Less successful have been the EPA's attempts since 1974 to allow companies to trade air-pollution permits. A large number of cities had failed to meet the standards laid down in the 1970 Clean Air Act. Rather than stop any new companies moving into such places, the EPA allowed them to buy the right to pollute from established firms which had cut their own emissions. Other refinements were added later.

Trade in air-pollution permits has undoubtedly kept down the costs of compliance. But the amount of trading, particularly between companies rather than within a single firm, has greatly disappointed enthusiasts. The main reason has been that America's litigious environmentalists have resented the idea that companies should have a right to pollute, let alone that they should be able to make money by selling it to another firm. They find it hard to accept

that it may be economically efficient for some polluters to do worse than official standards of cleanliness dictate, while others do better. Moreover, to work well, emissions trading needs better records of emissions than most American states possess. Otherwise, companies will see no reason to pay for what others are illegally taking for nothing.

In spite of the hostility of environmentalists, who see them as a way of making money from dirt, economic measures to tackle pollution are likely to increase. Regulations work best when they can be applied to a few large polluters. As pollution comes increasingly from many small sources—cars, farms, dry-cleaners, family rubbish bins—governments will increasingly have to turn to taxes and charges. As Ms Linda Fisher of the EPA puts it, "What people do with their garbage or their spent batteries is becoming as important as the pollution caused by a steel mill."

As monitoring improves and the costs of additional clean-up increase, marketable permits will also look more attractive. In June President Bush announced a scheme to cut sulphur-dioxide emissions with a scheme of tradeable permits for electricity utilities. The EPA is considering using marketable permits to phase out chlorofluorocarbons (CFCs). Indeed, some in the administration would like to see CFC permits auctioned, so that the windfall profits from its diminishing supply accrue to the government, not the chemical companies.

As yet, few of these elegant solutions will help China or Poland to clean up their rivers and air. The price mechanism ought to be a government's main ally in tackling pollution. Without it, there is no alternative to cumbersome regulation. What better argument for a market economy?

## Farmer waste and farmer dirt

*Why earth and water are not free*

**F**ARMERS make much the same mess of the environment the world over. They cultivate land too fragile to support crops, and cause soil erosion. They irrigate wastefully, causing water tables to drop. And they spray their crops too freely with pesticides and fertilisers, poisoning their customers, their rivers and their own families. Frequently they



No more land, many more mouths to feed

are encouraged by government policies that subsidise bad practice.

"I ask myself, what's likely to happen that will lead us to conclude that we're in trouble?" asks Mr Lester Brown, head of the Worldwatch Institute. He awaits, with grim satisfaction, the environmental disaster which he expects will threaten the world with social disintegration. "My sense is that the first global economic indicator will be rising food prices."

Mr Brown is a professional alarmist, who believes that the planet's remarkable ability to expand its food production even faster than its population may be approaching a limit. The immediate past contradicts him: between 1980 and 1985 world agricultural production per head grew by 4%. Some of that expansion has come from bringing more land under the plough. Mainly, it has come from irrigation, crop breeding, pesticides and, above all, chemical fertilisers. Since the mid-1970s world fertiliser use per unit of cropland rose by 40%; during the 1970s the area of irrigated land grew by one-third.

Now there are worrying signs that this lavish expansion of agriculture may be diminishing. Fertiliser use is levelling off. The yields of some important crops seem to be doing the same. In some parts of

the world, soil erosion is nibbling away at the area of cultivable land. For the past two years the world's grain production has declined, while the number of hungry mouths has continued to increase. That leaves many poor countries more dependent for their food on imports.

Measuring soil erosion is immensely difficult. It is, however, clearly a growing threat to farming in rich and poor countries. The United States, where the most careful measurements have been done, discovered in 1982 that about one-fifth of its cropland was losing topsoil at a rate likely to cause a decline in the soil's productivity. The country is now in the middle of a programme to convert 11% of its total cropland to grassland or forest before topsoil vanishes, leaving desert behind. India may be suffering a net loss of topsoil at four times America's rate. China's soil may be vanishing faster still: the Yellow River carries 1.6 billion tonnes of sediment to the sea each year—more than the Ganges, which drains an area 27% larger. Erosion in the Soviet Union, with the world's largest area of cropland, led to impassioned protests in 1982 from a Politburo member named Mikhail Gorbachev.

In some poor countries, sheer population pressure has made soil erosion worse by driving the landless on to marginal lands such as hillsides and forests. The growing shortage of firewood often means an ugly cycle of denuded hillsides, flash floods, silted rivers. In rich countries, farm subsidies have helped to drive up the price of land, encouraging the destruction of unproductive patches of woodland and hedges that once helped to hold topsoil in place.

Soil is not the only scarce resource that the world's farmers are using wastefully. Water is another. About 18% of the world's cultivated land is irrigated, two-thirds of it in Asia, but it produces 33% of the planet's harvest. Most projections of future food output assume large further increases in irrigation. But in many places the demand for irrigation water is already leaving cities thirsty. As irrigated agriculture accounts for about 70% of the world's use of fresh water, it needs to be efficient. At the moment, only one-third of the world's irrigation water helps to grow crops. The rest is wasted, often because farmers are not made to pay a price that properly reflects water's scarcity.

Again, rich countries make the same mistakes as poor. In California's Central Valley, farmers pay less than 10% of the average supply cost of irrigation water. The result is growing problems of waterlogged land and salinity, and a built-in incentive to grow low-value crops and ignore leaks and evaporation. The farmers who do best out of federal irrigation projects tend to be the richest. The taxpayer foots the bill for the rest. In poor countries, public irrigation projects tend to be a huge drain on government budgets and aid programmes (in the 1980s irrigation has accounted for more than a quarter of World Bank lending to agriculture). But a study of six Asian countries by the World Resources Institute found that government receipts for irrigation water averaged less than 10% of its full costs.

Water that is too cheap means water overused. In recent years the world's two main food producers—America and China—have experienced unplanned declines in their irrigated cropland (of 7% in America and 2% in China). In 1986 the American Department of Agriculture said that more than a quarter of America's 21m irrigated acres was being watered by pulling down the water table. Under parts of the north China Plain, around Beijing and Tienjin, the water table is dropping by one to two metres a year. In the Soviet Union the area covered by the Aral Sea has shrunk by 40% since 1960, mainly because of irrigation from the rivers feeding it. At the World Bank, projects for intensifying agriculture are stymied by water shortages.

To squeeze more output from their soil, farmers in both rich and poor countries have applied growing quantities of pesticides and artificial fertilisers. Both have saved from starvation many more lives than they may have cost through misuse. Yet both are applied in most countries in much greater quantities than is needed to get the highest economic crop yield.

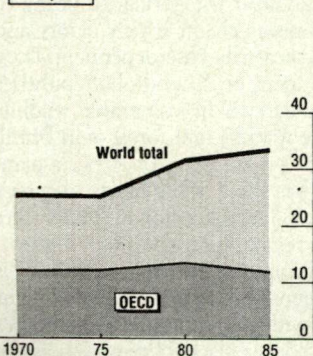
Increasing use of artificial fertilisers and pesticides occurs in both rich and poor countries. A recent study by the OECD ("Agricultural and Environmental Policies") pointed out that fertiliser use has trebled in the United States over the past quarter-century, doubled in Denmark and increased in Holland by 150%. The quantity of pesticides applied has risen, too: by 69% since 1975 in Denmark, for example, with a rise of 115% in the frequency of



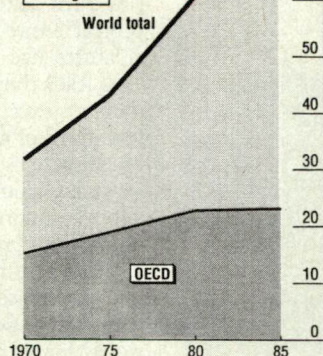
## Helping, hindering

World fertiliser use m tonnes

Phosphate

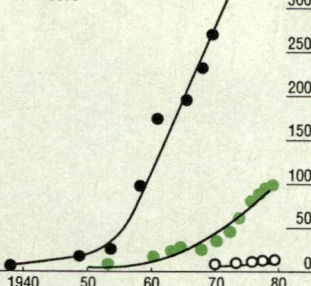


Nitrogen



Pesticide-resistant species

● Insects  
● Plant pathogens  
○ Weeds



Sources: OECD; World Resources Institute



application in the three years from 1981. Recently, pesticide use has begun to level off or fall in developed countries, as chemicals with more precise effects become available. America's pesticide consumption dropped 20% between 1973 and 1983.

Farmers frequently spread more chemicals on their crops than they need. A recent American survey found that over half the nitrogenous fertilisers applied in the corn belt were not needed to achieve maximum profits. A study by the International Rice Research Institute of pesticide use by farmers in the Philippines found that, with pest-resistant varieties of rice, even moderate applications of pesticide frequently cost farmers more than they saved.

Such waste puts farmers on a chemical treadmill: bugs and weeds become resistant to poisons, so next year's poisons must be more lethal. Part of the cost is borne by governments. In Egypt pesticide subsidies cost the government \$200m a year in the early 1980s. One cost is human health. Every year between 3,000 and 20,000 people die from pesticide poisoning, almost all of them in the developing countries, and another 800,000-1.1m suffer seriously. People in developed countries worry about the contamination of groundwater caused by artificial fertilisers. Nitrate pollution has increased dramatically in most industrial countries (with some of

the highest levels in British rivers).

At least part of the reason for the huge worldwide switch to artificial pesticides and fertilisers has been the way these farm inputs are priced. For instance, in most developing countries, pesticides are heavily subsidised. That kicks away any incentive to develop more labour-intensive ways of dealing with pests, although these may, in the long run, be more effective. Artificial fertilisers seem attractive gifts for rich countries to give to poor. Yet not only is fertiliser highly energy-intensive, but cheap fertilisers may cause farmers to stop allowing their land to recover by rotating crops or leaving it fallow. That, in turn, may make soil erosion worse.

A sensible farm policy for the world means abandoning subsidies, quotas and concessional loans. All these help, in different ways, to increase the intensive use of scarce resources and to cause countries to undervalue the costs of farm production, be they nitrates in drinking water or extinct butterflies. Price supports for food deprive farmers of an incentive to pursue mixed farming, which once was their best insurance against the collapse of one individual agricultural market, and encourage destructive monoculture. To feed an increasingly hungry world, farmers need every incentive to use their soil and water in ways that can be sustained.

## A treasure trove in the trees

*Why chopping down trees is bad economics, as well as bad ecology*

**F**ORESTS still cover three and a half times as much of the earth's surface as cropland. But they are shrinking at an accelerating pace. Since pre-industrial times, the earth has lost a fifth of its forests. Most have gone from the temperate countries of Europe and North America. The great tropical rain forests have been the least affected: until recently, they were inaccessible, and sparsely populated. Now they are being mined and torched.

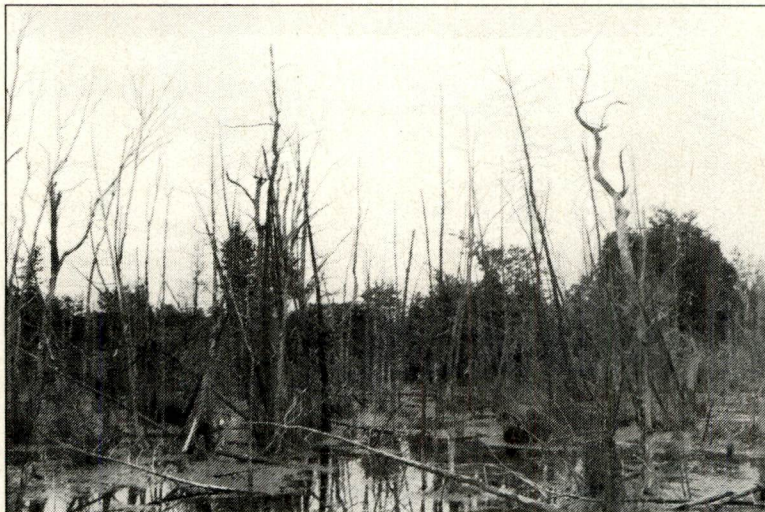
One reason for worrying about deforestation is that it adds to the carbon in the earth's atmosphere. Growing trees lock up carbon; burning or rotting trees release it. So most schemes to stop global warming (see next section) assume that deforestation

is halted and reversed. But there are other reasons for ending the destruction of the rain forests. First, the forests are far and away the planet's richest treasure troves of living things. But, second, to preserve them may guarantee their countries a better living than to destroy them.

"Biodiversity" is the dry word that conservationists use for the marvels of the jungle. A single hectare of Malaysian jungle may contain more than 800 species of woody plants—about as many as in all North America. In tropical rain forests live at least half—maybe three-quarters—of all the species that creep or run, swim or fly, including 90% of earth's insects. The Amazon alone contains one-fifth of all bird species in the world, and in its rivers swim at least eight times as many fish as in the Mississippi and its tributaries.

So tropical forests have become the top priority of conservationists. They have largely shifted their attention away from attempts to save individual species, such as the panda or the gorilla, to trying to protect entire "ecosystems", in which plants and creatures live complicatedly interdependent lives. This leads them to focus on a handful of countries that are exceptionally rich in vulnerable wildlife. One-third of all the world's rain forest is in Brazil. Madagascar is home to a quarter of Africa's plant species. Colombia has the world's richest diversity of birds, Indonesia, its highest mammal-count. Zaire has Africa's largest remaining tract of rain forest.

The case for trying to save this biodiversity is not merely sentimental. Ordinary people might think that a world without gorillas or baobab trees would simply be a poorer place. Bodies such as the World Wildlife Fund like to point out that, without



Think of them as carbon stores

a rich genetic bank to draw upon, the world's medicine and agriculture would be poorer, too.

Tropical plants have been the basis of several useful drugs, but vast numbers have yet to be tested for their medical properties. Tropical forests are also stores of genetic material to feed back into cultivated plants. Ever since 1845, when blight wiped out the Irish potato crop, people have been aware that the genetic uniformity of cultivated plants makes them highly susceptible to disease and pests. To protect them, plant breeders constantly have to reintroduce wild strains into domesticated crops. Mr Russ Mittermeier of the World Wildlife Fund likes to say, melodramatically: "Democracy in Latin America may depend on conservation in Madagascar: if rust hits the coffee crop, the continent could lose its main source of income. There are 50 species of wild coffee, many of them caffeine-free, in the rain forests of eastern Madagascar." American audiences particularly like the bit about "caffeine-free".

Fine, but none of these arguments feeds many Brazilians or Madagascans. Get Hoffman La Roche or Eli Lilly to set up a large research lab on the doorstep of the jungle, and that might be different. If the few countries with these genetic treasure troves are to be persuaded to keep them mainly for the benefit of the rest of the world, then logically the rest of the world ought to pay.

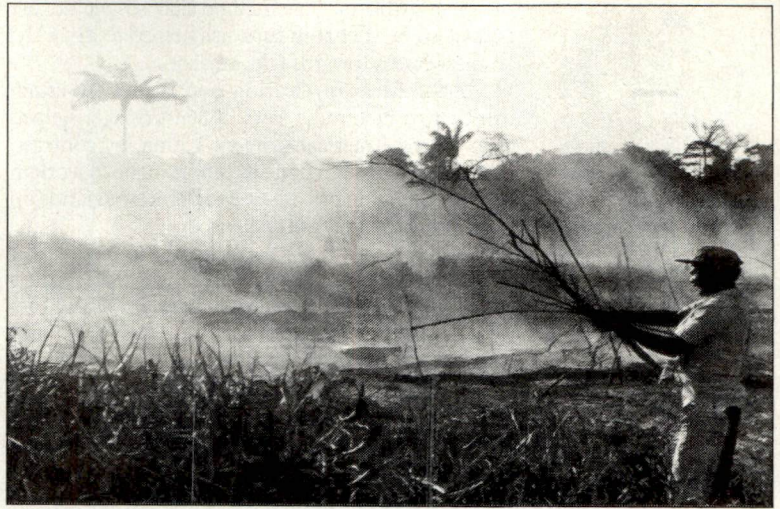
From such logic has sprung various schemes for buying up third-world debt and swapping it for conservation schemes in debtor countries. Conservation International, an American organisation, bought \$650,000 of Bolivia's commercial debt in 1987 at an 85% discount, and cancelled it in exchange for a promise from the Bolivian government to finance and expand a national nature reserve. Since then "debt-for-nature" swaps have been completed with Costa Rica, Ecuador, Madagascar and the Philippines, mostly by voluntary organisations but also by the Dutch and Swedish governments.

Some third-world countries regard such schemes as environmental colonialism. Others are coming to realise that their wildlife offers a way to squeeze cash from their rich creditors. But the creditors would be wise, before signing cheques, to get third-world governments to look at the ways their own policies aggravate deforestation, and at the costs of deforestation that fall on their own economies.

Although population pressure, land hunger and a need for fuel wood have all helped to cause deforestation, it has been hugely encouraged by bad economics. A tropical forest may be far more productive than the scrubland which often succeeds it. That is the nub of recent work by the World Bank and by Mr Robert Repetto at the Washington-based World Resources Institute.

Most third-world forests, like those of the industrial countries, are on public lands. Governments, therefore, usually decide how forests should be used. Typically, they make a number of mistakes:

- They allow heavy logging, but exaggerate the economic gains. Most countries collect derisory royalties from timber; none does the sensible thing, and auctions off logging rights, as Britain and America auction oil-drilling rights. If such auctions were held, conservationists could bid, too. If they succeeded, they could choose to leave trees uncleared;



### How wonders are lost for ever

either way, governments would gain extra revenue.

As it is, less revenue for the government means bigger gains for loggers. Yet logging creates far fewer jobs than harvesting forests, by nut-collecting or rubber-tapping, for instance. Almost all tropical wood-exporting countries have fewer than 1% of their workforce in the timber industry—a figure half of that in Canada, which is a much more diversified economy.

- Governments have also frequently assumed that fragile forest lands can easily be cleared and farmed. Others, too, have fallen into this trap. In the late 1960s and early 1970s the World Bank took the view that developing countries had large tracts of unexploited land that could be cleared for development. The Bank has now changed its view—but not before becoming heavily involved in Brazil's unwise Polonoroeste project to colonise its tropical forests with small farmers, and Indonesia's now-abandoned plans to move 1m families from Java to its forested outer islands.

While exaggerating the tenuous gains from deforestation, governments also frequently ignore the costs. Rainfall diminishes. Water supplies become less reliable. Soil erodes, silting rivers and harming dams. Hungry Ethiopia is one consequence of forest-clearing; unstable Haiti another; a third is Panama, whose canal is inexorably filling with silt washed off the denuded lands around it.

So the costs of tree-clearing usually exceed the benefits. Moreover, governments consistently undervalue the benefits from leaving forests untouched. For the world's 500m forest-dwellers, they are a source of food, fuel and furniture—usually unmarketed, and so unvalued. Even when forest products other than trees are exported, statistics on their value are rarely collated.

Forest destruction is often aggravated by other government policies. Two recent studies by the World Bank (one by Mr Hans Binswanger and one by Mr Dennis Mahar) demonstrated that a mixture of subsidies and tax allowances had greatly encouraged the deforestation of the Amazon. Brazil's tax system (like that of many other countries, developed and developing) virtually exempts agriculture and turns it into a tax shelter. That adds to the demand for land and drives up its price, making it harder for





the poor (who pay no income tax, so get no tax breaks) to buy. That in turn has helped to drive the landless north towards the Amazon.

In the Amazon, clearing land is a way to establish title to it. Similar laws, a century ago, helped clear North America's forests. China, by contrast, has shown that such policies can be made to work in reverse, by giving private title to deforested lands on condition that they are replanted.

Again, in some parts of Brazil, tax credits for livestock projects have been the single biggest cause of forest-clearing. Yet such projects are rarely economic. Many are set up to strip the land and offset the consequent operating loss against other sources of income. The government loses revenue, the world loses trees. Such policies thrive because those who benefit are powerful and close to government, whereas the forest-dwellers, who have managed their land communally for generations, are powerless and remote.

Realistic conservationists hope to keep some rain forest—perhaps 5-10%, says the World Wildlife Fund—pristine, as a sort of “natural capital in the bank”: nobody knows how many species would survive in managed forests. For the rest, they hope to be able to persuade third-world governments to

manage their forests. A few studies have begun to show what forests are worth without logging. One, by the New York Botanical Gardens, valued the output of fruit, latex and timber, on the basis of what they could be sold for locally, at \$9,000 a hectare (compared with less than \$3,000 a hectare for cow pasture). The timber alone was worth less than 10% of the total, and if cutting down a timber tree killed latex or fruit trees, that wiped out the gain from logging.

The attitudes for which the West blames the developing countries today are those which rolled back the native forests of America only two centuries ago. Indeed, many of the destructive policies of the third world have their counterparts even now in the West. In America, the Wilderness Society has been campaigning for years to end the subsidies that the Forest Service pays to persuade contractors to destroy its forests. Each year the American taxpayer provides \$100m to pay for the harvesting of timber too cheap to cover its costs. The most heavily subsidised logging is on land too arid and cold to reforest. To the growing horror of the Wilderness Society, subsidies are encouraging logging in America's last great temperate rain forest, the Tongass, in Alaska. Perhaps the Brazilians ought to protest.

## The warming globe

*Why a hot world needs dearer energy*

“EVERYBODY talks about the weather, but nobody does anything about it,” said Charles Dudley Warner. He spoke too soon. Some of the gases that have built up in the atmosphere since the industrial revolution—carbon dioxide, nitrous oxide, methane and CFCs—have the ability to trap some of the sun's returning rays like the glass of a greenhouse. As a result, many scientists believe, the planet's surface may warm up far more rapidly than at any time in the past. If that happens, the world may eventually be able to support fewer people than it can today.

The evidence for global warming is still largely conjectural. True, the global temperature has risen by about 0.5°C since the start of this century, and the six warmest years on record have fallen in the

1980s. But most meteorologists are not yet sure that the globe is already warming. Untangling the greenhouse effect from other broad movements in the earth's temperature is extremely difficult.

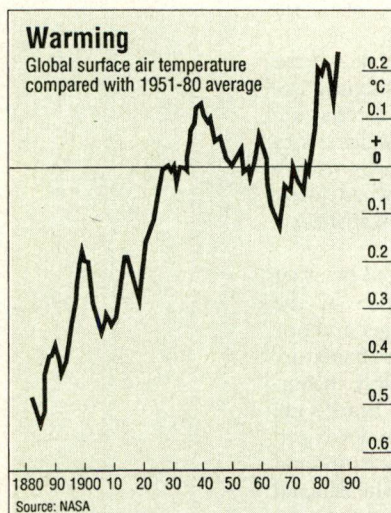
Besides, warming will be enhanced or offset in some highly uncertain ways. For instance, a warmer atmosphere will hold more water vapour. Low clouds reflect sunlight, and so help to cool the earth; high clouds let sunlight through but trap returning radiation, so helping to warm the earth. The ocean mops up much of the world's output of carbon, but warm water holds less carbon than cool. As the sea will heat up more slowly than the land, will it become

a carbon source, not a sink?

The pace of warming is almost impossible to predict. But at any given time, the actual warming that has taken place will be less than the warming to which the planet is eventually committed. Even if man stopped producing greenhouse gases tomorrow, some warming would still take place. The conventional wisdom is that the global mean temperature will rise by between 1° and 2°C by 2030, and a further 0.5°C by mid-century. In 60 years, in other words, the temperature could rise by half as much as the rise of 5°C since the last ice age, 18,000 years ago. Think of the vast alterations in the earth's geography caused by that infinitely slower change. For many of earth's plants and animals, a few degrees make the difference between survival and extinction. “Global warming”, thinks Mr Norman Myers, a British environment consultant, “may prove to be the single greatest threat to our fellow species.”

Those who live in cold climates may rather like the thought of warmer winters, and the Soviet Union has been intrigued by the idea of being able to cultivate its uninhabitable steppes. But climate models find it hard to predict the way the weather will change in particular regions. For instance, latitudes nearer the poles may heat up more than those nearer the equator. That will probably change the pattern of ocean currents. A shift in the Gulf Stream could alter the climate of Western Europe or America by more than the greenhouse effect alone.

People, too, will find it hard to adapt. As warm water expands, the sea level might rise. One estimate says that a rise of 1-2°C might cause a 30-40 cm rise in sea level. Some of the world's most densely populated areas are most vulnerable to flooding. Nearly one-third of mankind lives within 40 miles of



the sea, where land tends to be richest—in Bangladesh, the Nile delta, China, Japan and the Netherlands. Quite a small rise in sea level might cause a growing tide of environmental refugees. Sir Crispin Tickell, Britain's ambassador to the United Nations, draws a hair-raising picture of a world in which changing climate might, at a cautious guess, drive over 60m people from their homes. "Desperation could push Africans into Europe, Chinese into the relatively empty parts of the Soviet Union, and Indonesians into northern Australia. Sheer numbers could swamp most efforts at control."

By the time scientists know more about the size and timing of global warming, it will have become more difficult and expensive to tackle. A vast study of the ocean, that clue to many of the unknowns, will not be complete for a decade; but with every year that passes, the earth may be committing itself to faster warming.

### How to cool it

Several countries have already decided to end their use of the most potent group of greenhouse gases, CFCs. Quite apart from trapping heat, CFCs also destroy the layer of stratospheric ozone that shields the world from the sun's harmful ultraviolet rays.

Curbing the use of CFCs will be relatively easy. Production has dropped from its peak in 1974, thanks to bans on most aerosol use in America, Canada and Sweden. They are produced by few firms in few countries (Du Pont and Allied-Signal accounted for three-quarters of America's output in 1986). For the biggest uses of CFCs—as refrigerants, aerosol propellants and bubbles in insulating foam—there are possible substitutes. Even so, it is still not at all clear that developing countries can be persuaded to use them.

At least it is clear where CFCs come from. Not so with two other greenhouse gases—both, molecule for molecule, much more important than carbon dioxide. Methane probably comes from rotting waste, flatulent animals, leaking natural-gas pipelines, fermenting rice-paddy fields. Nitrous oxide comes partly from the engines of cars and the chimneys of coal-fired power stations, but also from fertilisers and land clearing. Both gases are likely to be far harder to curb, for both technical and economic reasons, than emissions of carbon dioxide.

And that will be hard enough. Carbon-dioxide emissions come partly from deforestation, which accounts for 10-30% of man's annual carbon-dioxide emissions to the atmosphere. Almost all the rest comes from the burning of fossil fuels—coal, oil and natural gas—which, on combustion, release their stored carbon into the skies. So the main way that global warming can be slowed down is by reducing the combustion of carbon-rich fossil fuels.

A meeting of scientists, conservationists and politicians in Toronto in June 1988 ended with a call for a 20% cut in emissions of carbon-dioxide by 2005, and by 50% by 2025. Most people think that cannot be done. Emissions of carbon dioxide by OECD countries grew by about 4% a year between 1960 and 1973. Thereafter, in spite of the massive oil-price rise and the spread of nuclear-power stations, carbon emissions still grew by 1.5% a year. Conventional estimates predict a growth of about 3/4% a year from now on. And while the OECD coun-

tries consume just over half of the world's commercial energy, that share is falling fast. The growth in energy use in future will come almost entirely from developing and eastern-bloc countries.

One attempt to sketch out how the world might stop warming was presented recently by Mr Irving Mintzer of the World Resources Institute to a meeting at the East-West Centre in Hawaii. The WRI will publish it this autumn. He used a computer model to show how the commitment to future warming might be stabilised by 2060. He made several crucial assumptions:

- World population stabilises at about 8 billion in 2075. This is the United Nations's "low" guess: its central guess is much higher.
- Economic growth per head in 1975-2075 is about 3% globally; for today's developing countries, between 1975 and 2025, real income per head grows at 4.6% a year. By 2025 this raises real incomes in these countries to about the level of Denmark's in 1975.
- An annual improvement in efficiency of energy use of 1.7-2.4% in today's industrial countries, and 1.4-2.3% in the developing world. In the past decade the improvement has averaged just over 1% a year. It could be done with existing best technology but will require sharp price increases for fossil fuels. Gas and oil prices quadruple in real terms; coal prices triple by 2025 and then decline, as coal demand falls.
- Coal is largely replaced by 2075 by natural gas, solar, nuclear and renewable fuels.
- Use of CFCs stops by 2020 in the industrial world, by 2050 in the developing countries.

"It's technically feasible but politically impossible," Mr Mintzer believes. His study shows that energy conservation is beyond a doubt the most fruitful and cost-effective way to slow global warming. But to persuade people to use energy more efficiently will need economic incentives. For the more expensive that carbon-rich energy becomes, the greater the incentive to introduce technologies to save it. If governments rely on information alone to persuade people to buy more efficient cars or insulate their homes, people may well use their savings



Sir Crispin's nightmare starts here



to drive their efficient cars more often, or to turn up the central-heating thermostat. If so, their demand for energy will not decline.

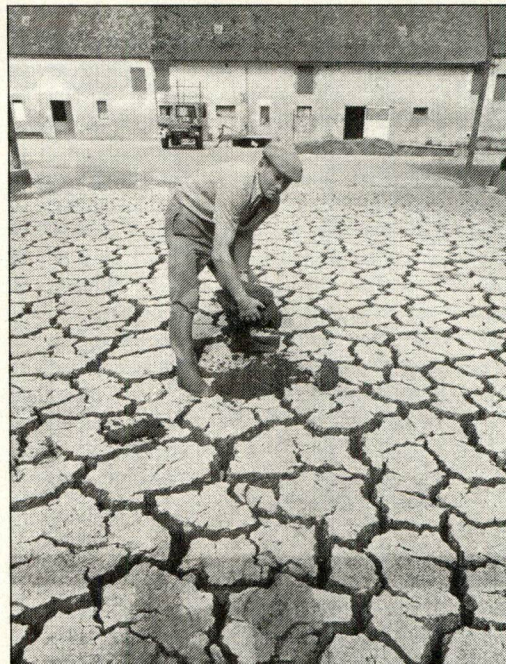
Rich countries shelter energy prices in various ways. ("Look at the cost of sending a 200-ship flotilla to the Persian Gulf to keep the oilways open," grumbles Mr Mintzer. "That doesn't show up in the oil price. It's buried in the defence budget.") Most third-world countries subsidise the consumption of electricity, natural gas and coal. Countries with subsidised energy use it less efficiently than those where it is expensive. Indeed, third-world countries account for some of the most appalling examples of energy waste. Like Egypt, which uses a quarter of its electricity (subsidised, inevitably) to drive one vast aluminium plant, in a land that produces no bauxite.

The best way to make sure that the price of energy reflects the damage it does to the environment is to tax it. Governments are showing a wary but growing interest in the concept of a carbon fee: a tax that would be levied on fossil-based fuels proportionately to the amount of carbon they contained. The effect would be to make coal dearer than oil, and oil dearer than natural gas. Even in the United States, the administration is worrying increasingly about the effects of allowing the price of petrol to fall to its lowest level in real terms since the Korean war. Next year the United States will again be dependent for more than half its energy on imported oil. It would not be surprising if something called, perhaps, an "atmospheric users' fee" were prepared for next year's budget.

The scope for saving energy from existing technology is clearly enormous. A switch to greater efficiency could be speeded up by rules to set minimum standards for cars, domestic equipment and the insulation of new buildings, as well as by insisting on the labelling of domestic appliances to show how much energy they use. The more industry and domestic users get clear information on the amount of energy they are using and how they might reduce it, the faster they are likely to respond.

Governments particularly need to change the attitudes of gas and electricity utilities, most of which see their job as selling as much energy as possible. Yet, for most of them, it costs more to produce extra power than to persuade their customers to use what they get more efficiently. One man who has turned this paradox into a business is Mr Angus King. Last year he worked for a firm building small generating stations and selling electricity to utilities. Declining power prices made that increasingly unprofitable. "For 9 cents a kilowatt hour, you can build a hydro-station," he says. "For 5 cents you can't build much of anything, but you can change light fixtures."

Now his company, Northeast Energy Management, will sell 48m kilowatt hours of electricity to the Central Maine Power company—about a third of the growth in its industrial and commercial load this year. But he does so by contracting to get the power company's customers to cut their electricity use, rather than by building new power stations. He goes to an industrial user and offers to pay about two-thirds of the cost of installing more efficient equipment. The user meets the rest of the cost, and keeps all the resulting savings on its electricity bill.



And that's just the beginning

For the user, the payback period on energy-saving investment is thus cut from about five years to 18 months. Mr King gets paid by the power company the same rate per kilowatt that he would get for generating new electricity. Not surprisingly, utilities in New York and Massachusetts have plans to copy this ingenious scheme later this year.

Quite apart from using energy more efficiently, people will need to use different fuels. In particular, they will need to switch away from coal, even though the world's proven reserves of that fuel vastly exceed those of oil and natural gas. But burning oil releases 70% as much carbon dioxide as coal, natural gas 50% as much.

Only one way of generating electricity is now commercially viable and produces no carbon dioxide: nuclear power. Plenty of evidence suggests that nuclear power is a worse buy than energy efficiency, if only because of its huge capital cost and lengthy payback period. But any programme to stop global warming will almost certainly have to include a large expansion of nuclear power. This is awkward for many greens, whose first and deepest sentiment is a hatred of nuclear power. Several countries now have a moratorium on new nuclear plants. In Sweden the government has even committed itself to phasing out its nuclear stations by 2010.

Many developing countries, having embarked hopefully on nuclear programmes in the early 1970s, have found them plagued by delays and cost over-runs. The sheer size of investment needed to build even one plant makes nuclear power intimidating for countries with little foreign-borrowing capacity. The World Bank refuses to lend for nuclear programmes. Above all, developed countries will worry about the security implications of putting more nuclear capacity in countries which may turn out to be hostile, or irresponsible, or simply inept. With China sitting on one-third of the world's known coal reserves, it will be a hard choice.

## Hanging together

"THE earth is one but the world is not," begins the Brundtland report. What goes up one country's chimneys or down its drains may come to rest on the trees or beaches of another; your deforestation causes my droughts and floods. The easy green problems are those that countries can solve for themselves. The hard ones will need co-operation.

For example, the gases that cause global warming are produced mainly by rich countries. The rich countries got rich by polluting freely, and exploiting those resources that they now want low-income countries to conserve. But the future increases in greenhouse gases will come mainly from the developing world. Poor countries, with their large populations, low incomes and fragile agriculture, may suffer more than rich ones if the world warms and the sea rises, for they have less room for manoeuvre. But they may still resent being told by the rich, "Do as we say, not as we have done." As Mr Bill Reilly, head of America's EPA, puts it: "The developing countries are saying, if this train goes out of the station too fast, we will not be aboard."

Even among the rich countries, huge differences in energy efficiency leave room for plenty of arguments. The Japanese point out that their ratio of energy to GNP is half that of America. So any given target for future carbon-dioxide emissions would be much harder and more expensive for Japan than for the profligate United States. Countries without big coal industries are likely to be more enthusiastic supporters of tough limits on carbon dioxide than big coal-burners. At The Hague conference on global warming earlier this year, the most active countries were Norway (big on hydro power), France (atomic), and Italy and Holland (natural gas). Moreover, once the regional impact of global warming becomes clearer, some countries (say, Russia) may think that they will actually benefit from global warming, by being able to farm the tundra. Their compliance will be harder to win.

Any one country that unilaterally takes action to stop damaging the ozone layer or warming the globe risks putting itself at a comparative disadvantage, while other countries make up the emissions it has suppressed. Some small, rich countries may take the risk: Norway, with lots of low-carbon oil and natural gas, aims to stabilise its carbon-dioxide emissions in 2000, with cuts thereafter. Other countries will want proof.

The saga of CFCs, once again, may be the template for global warming. Their potential for damage was spotted in the early 1970s. In 1977 a report, drawn up at the OECD, was noted and shelved. In 1979, when the Nordic countries, Canada and America were urging action, Japan, Britain and West Germany all wanted more proof that the ozone layer was being harmed. Not until theory was proved by observation was there agreement to act. And even in 1985 the Vienna convention on the ozone layer was for research only.

Even once signed, international conventions are weak tools. They rely entirely on nation states to enforce them, and their main sanctions are the pres-

sure of world opinion. In future, environmental conventions may try to use trade sanctions to whip disobedient countries into line. Otherwise, some countries will succumb to the temptation to become dirt havens, sheltering carbon-dioxide-belching or CFC-spraying industries and profiting from exports of cheap steel or computer parts.

It will be important to find the right institutions in which to discuss problems such as global warming. Any framework that excludes the poorer countries is likely to fail. The French, Dutch and Norwegians campaigned at The Hague for a new global environment authority with enforcement powers, and a special fund to help poor countries tackle global warming. Mr Reilly prefers the idea of building on the United Nations Environment Programme. The British fear that creating a new body would lead to endless time-wasting argument. Once the Inter-governmental Panel on Climate Change, set up last year to study the evidence of global warming, submits its interim report in October next year, a draft convention is likely to be tabled. Particular protocols, on issues such as carbon-dioxide emissions, deforestation and agriculture, might then be attached to it over time. These negotiations will be the acid test of the willingness of countries to change their citizens' behaviour, rather than risk changing the climate.

### Eco-bargaining

In theory, the anxiety of rich countries to stop damage to the environment puts a powerful weapon in the hands of the poor. They can, if they choose, demand help from the rich world to preserve tropical forests, find safer kinds of energy, dispose safely of toxic waste. Some big debtors are offering vague agreements to be kind to local conservationists in exchange for wiping something off the slate.

Both sides should be wary of such deals. In some debtor countries there is now much talk of "eco-colonialism". To link the humiliation of debt with the case for conservation risks a nationalist back-



*Why countries need to talk green to each other*



Your warm house, our dead trees



lash against busybody foreigners who cut down their own trees, and then go abroad and tell poor people not to cut down theirs. Besides, it is not always clear that conservation can be helped by foreign cash.

Certainly, the experience of the World Bank is discouraging. The Bank is struggling to build the concept of sustainable development into its lending programmes. Its own review of the effect of its policies on the environment, produced last year by its independent Operations Evaluation Department, argues that there is "surprisingly little evidence of gross negligence or damage" in the impact of past projects on the environment. But the review also admits that environmental mistakes may take many years to show up. Conversely, in now trying to stop future damage, the Bank finds it hard to cope with the timescale involved. Benefits tend to be distributed over a long period. And environmental projects are highly staff-intensive. The Bank is being pushed by its shareholders to lend more, with fewer administrators. At least one member of its environmental department thinks, "We're trying to throw

cash at a problem that doesn't require money".

The damage poor countries are doing to their farm land will, in time, impinge on the rest of the world. If more trees are cut down, soil erosion proceeds, and water shortages grow worse, there will be more Ethiopias, and more Sudans. One result may be sporadic third-world conflicts—over the headwaters of the Nile, perhaps, or erosion upstream of the Ganges. Nearly 50 countries on four continents have more than three-quarters of their land area in international river basins.

More third-world people will struggle to enter the rich nations. The United States, one of the few rich countries with a land border with a low-income state, has already seen a wave of migration from the south. Other rich countries will have to be increasingly brutal to keep out such economic refugees. Above all, world food prices will rise. That will push poor food-importers deeper into debt. It may cause tensions among the rich countries, too. Japan is the world's largest grain importer. How will American consumers feel about competing with the Japanese to buy their own food?

## When green is profitable

*What the environment means to industry*

**L**OTS of companies can see ways to benefit from the new enthusiasm for the environment. In rich countries a new breed of "green consumer" seems happy to spend extra money for products which claim to be kind to the earth. All sorts of businesses have jumped on the bandwagon, and those already aboard have felt cheerfully smug. Broadly speaking, the best-run companies are usually the cleanest ones, too.

Many firms have by now seen a marketing opportunity in making their products environmentally friendly. Some have begun to grasp that this is only a first stage. Those who buy, say, an aerosol prominently labelled as "free of CFCs", will also start to ask what damage the other chemicals in the package may do. And then, perhaps, what happens

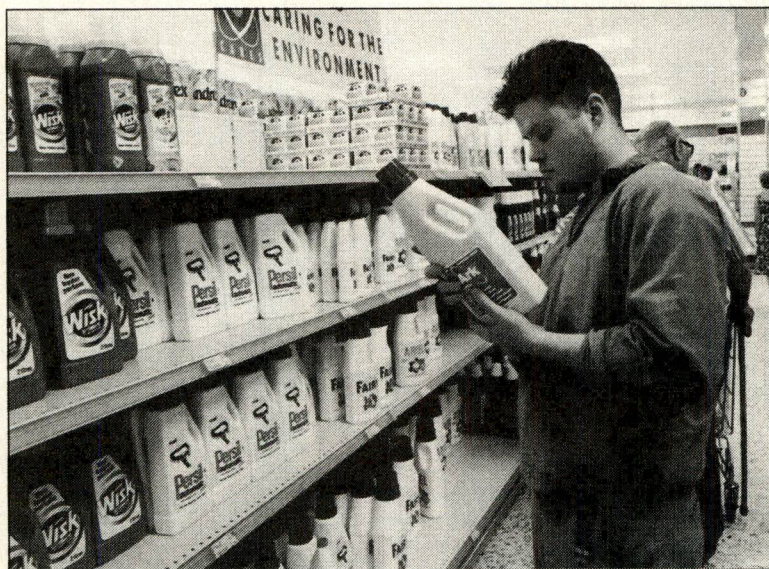
to that manufacturer's effluents, or solid waste, or emissions? Or whether the factory is an eyesore in a lovely spot? Or whether the firm has a subsidiary that chops down rain forests? At that point, companies start to see that trading on the environment may be more challenging than they first thought. They may also find that they have no system to measure their environmental performance, or to make sure that the board takes responsibility for it.

"It's a question of culture, not of three or four priorities," says Mr Tom Burke, director of Britain's Green Alliance, a green lobbying group. "The two corporate priorities for the 1990s are the environment and recruitment. I tell firms that they are linked. Good people don't like working for a company with a bad environmental image."

The big oil companies have understood this for a long time (though some have taken it to heart more than others). For other firms, which have not perceived their business as having environmental impacts, it is a new idea. Mr Burke has been telling the banks in Britain's high streets that they are more likely to do well in the tight market for financial services if they sell values—especially green values. That means more than giving a nice cheque to the World Wildlife Fund every so often. It may mean looking at the energy efficiency of their branches, for example, or asking questions about the insulation of the houses that mortgage borrowers want to buy, or the waste-disposal arrangements of corporate borrowers.

Companies like the idea of going green to woo consumers. They are less pleased about being hounded by governments to clean up. Three trends will matter:

- It will become increasingly difficult and expensive to get rid of corporate waste. Big American chemical companies, faced with the threat of tough new laws to make them cut their wastes, have been racing to



Buying a clean conscience

show how well they can do the job voluntarily. Du Pont hopes over the next two years to cut by 70% the amount of hazardous waste produced by its factories. Monsanto has announced that it will cut its air emissions of hazardous chemicals by 90% by the end of 1992, and its discharges of organic and toxic inorganic waste by 70% by the end of 1995. It wants to be seen to be a good citizen; but it also thinks that low-waste plants will sometimes be cheaper to run than dirty ones.

- Companies will be under growing pressure to keep track of environment-damaging products long after they leave the factory gates. The EEC Commission has been considering rules to promote the recycling of plastics which might force the plastics industry and its customers to take full responsibility for the ultimate fate of their products. Again, Du Pont has seen a way to turn such threats to its advantage. Mr Nicholas Pappas, Du Pont's executive vice-president, announced a big scheme earlier this year to recycle plastics from municipal wastes. "All plastics, regardless of construction, are one of the most recyclable of materials," he declared. Alcan Aluminium announced in Britain earlier this year that it was to build Europe's first plant to recycle aluminium drinks cans. Recycling uses only 5% of the energy needed to extract aluminium from bauxite in the first place. Egyptians, please copy.

- Companies will find it harder and more costly to get insurance against damage to the environment. The more governments and courts insist that companies should pay for the damage they do, whether through asbestosis, exploding chemical plants or holed oil tankers, the more expensive will insurance become. In the United States the courts have begun to send chief executives to jail—not merely imposing a fine that their companies can pay—for deliberate acts of gross environmental negligence such as

the illegal dumping of carcinogenic chemicals.

Now some countries are greatly extending the concept of liability. American legislation has made companies liable for the costs of cleaning up toxic dumps, even when they complied fully with the law in disposing of their waste. West Germany is considering proposals to make firms liable for environmental damage even when it is caused by routine, authorised operations, and when it occurs at a distance, as with air-pollution harm to forests. Nor are developed countries the only ones to toughen these rules. In 1986 India's supreme court ruled that companies engaged in hazardous activities had absolute liability for accidents, whether or not they had acted in good faith. Compensation for victims would be based on a firm's capacity to pay.

Among the firms that will do well out of these new pressures are lawyers, waste-management specialists and management consultants (who, in Mr Burke's view, will develop a "vast green-bullshit industry"). Big, well run companies will prosper—indeed, governments will use them to set the pace for change, arguing that if they can produce cleaner technology, then it should become standard. So will small, clever entrepreneurs.

Some governments have begun to boast about the size of their environment-cleaning exports. The countries with the toughest standards tend to do best—led by Japan and West Germany. Some newly industrialised countries, such as Taiwan and Singapore, are catching up, spurred by increasingly stiff environmental regulations at home. And some industries have begun to realise that environmental regulation offers the best argument for trade protection. Why should companies in dirtier countries be allowed to cut costs and compete with us, they will ask. Trade will increasingly prove a powerful force for cleaning up the world.



## Into the unknown

UNLIKE most of the issues that politicians deal with, damage to the environment does not happen suddenly. Occasionally, one telegenic event—such as the spillage from the *Exxon Valdez* or the annual burning of the Amazon—grabs attention and demands instant action. But most of the problems described in this survey have been building up over years, barely noticed.

Many of the effects of harming the environment will always be diffused and uncertain. Over the next 30 years far more people will die from smoking cigarettes than from the hole in the ozone layer. More are killed by driving cars than by what comes out of their exhausts. Perhaps the Sahel droughts are linked to the destruction of the Amazon; perhaps the disastrous floods in Bangladesh will appear, one day, to have been the first harbingers of the disruptive impact of global warming on the climate. But it may take a generation to establish whether deforestation causes starvation, or coal-burning causes drowning, on the other side of the world.

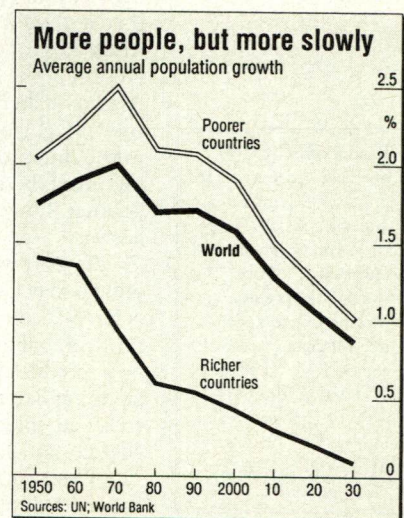
Astonishingly little is known about the ways in which humanity affects the environment. Where di-

asters have been predicted in the past, by Malthus or by the Cassandras of 1972, they have frequently failed to appear. Oil has not begun to run out, world population growth has not continued to accelerate, food production per head has increased. Small wonder that sceptics argue that those less visible horrors, the hole in the ozone layer and global warming, may just turn out to be passing blips in the long history of meteorological variations.

Undoubtedly, the earth is extraordinarily resilient. Undoubtedly, too, the primitive state of understanding of the environment means that some surprises lie in wait. They will not all be nice ones, nor happen gradually, giving plenty of time to adjust. There may be thresholds beyond which gradual change suddenly becomes precipitate.

To get people to change their

*Going for greener growth*





ways enough to carry out Mrs Thatcher's "full repairing lease" will be unimaginably difficult. The concept implies asking people to give up goodies today for the sake of citizens in other countries—or even for generations yet unborn. What politician has ever done anything so quixotic before? To get people to stop polluting their own country is hard enough. To get them to stop defiling the unowned atmosphere, or the accommodating ocean, will be many times harder. To do anything at all in countries where governments are weak, or controlled by the very people who gain most from dumping, logging or poaching, will be almost impossible.

The difficulty is not mainly one of technology. Mankind's ingenuity is quite capable of providing technical answers to most environmental problems. Cars that will do 100 miles to the gallon, agroforestry schemes that combine trees with crops, buildings that need one-third as much energy to heat them as typical American homes, vetiver grass that grows cheap terracing and stops soil erosion: all these exist, and many more ingenious solutions would be devised and adopted, given the right economic incentives and political will.

There's the rub. Sensible economics, as this survey has argued, can avoid much environmental damage. But the reason that countries do not pursue sensible economics is that powerful lobbies benefit from the foolish kind. Tax breaks, subsidies, trade protection—all put money into the pockets of noisy well organised groups at the expense of the mass of unorganised, passive consumers. Rich democracies frequently give special treatment to groups (such as big farmers or logging companies) whose subsidised activities may cause environmental damage. How much more tempting is it in poor countries, where those who gain most may be the ruling class, or in centrally planned economies, where the absence of a market makes it hard to see who profits and how?

The most intractable environmental problems are those that only political or institutional change can cure. Two of the most fundamental sources of harm are the generation of energy, and population growth. A world that has grown used to the freedom of cheap travel, the comfort of warm houses, the convenience of electrical machinery, will not willingly pay much more for its power, or accept that it should be used more frugally. Yet a whole host of environmental problems—the erosion of the Parthenon, the oily beaches of Alaska, Chernobyl's fall-out, Colorado's brown fog, global warming itself—originates in the thirst for energy. Almost all the cures for one of these problems involve aggravating another. Only conservation offers a win-win answer.

As for world population, its rate of growth may have stopped accelerating, but it is surely inconceivable that the earth can support 14 billion people—the eventual total now predicted by the United Nations—at anything like the standard of living enjoyed today in middle-income countries such as Mexico and Malaysia, let alone that of the rich West. Simply to provide food, water and firewood for almost three times as many peo-

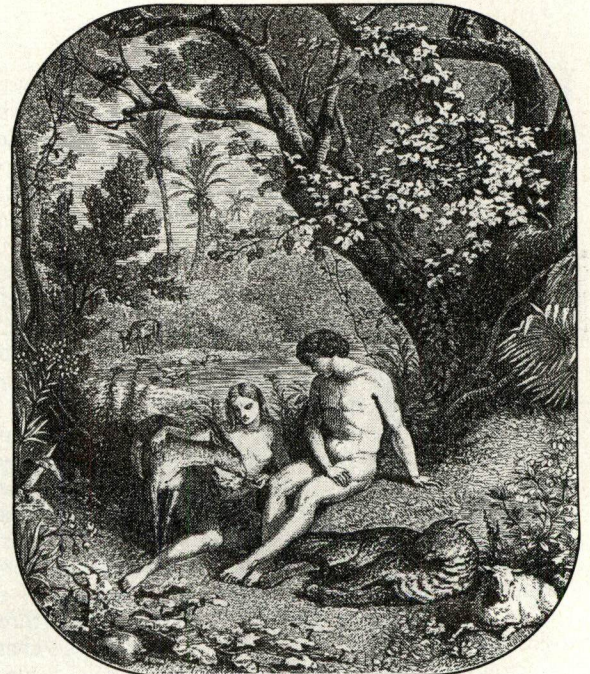
ple as are alive today will cause huge changes. More land will be ploughed up, driving out species of animals and plants; seas will be scoured for protein; new cities spring up; new rubbish dumps accumulate. The countries in which growth will be fastest will be mainly those with least room for manoeuvre: the poorest lands, with the most fragile soils. To get third-world birthrates to hasten towards western countries' stability will take more than money. It will take lots of political backing and cash for family-planning programmes. A bit of commonsense from the Vatican would help in Latin America. So (in a small, grim way) may AIDS.

At the root of all environmental argument is the question: can growth be clean and green, or is it inevitably harmful? In the short run, a country that freely pollutes its air and erodes its soil may grow more quickly than one which tries to live off the income from its natural resources, rather than squandering its stock of natural capital. Many countries, though, may not have the luxury of choice. Environmental damage may be a check to growth. That is true particularly for poor countries. But even for the rich, a degraded environment may reduce the value of economic growth. Clean water, healthy trees, safe beaches are all part of the quality of life, just as much as ownership of a car, access to a good hospital or holidays abroad.

Growth that is not environmentally harmful may be different from the growth that the industrial and industrialising countries have known up to now. It will almost certainly be slower, as resources now being consumed are conserved instead. Instead, more satisfaction will have to be squeezed from a given amount of natural resources. But technology is just as capable of befriending the environment as of harming it. The stove uses less energy than the open hearth, the wheel less energy than the sled. What we need is the will. With that, most things are possible.

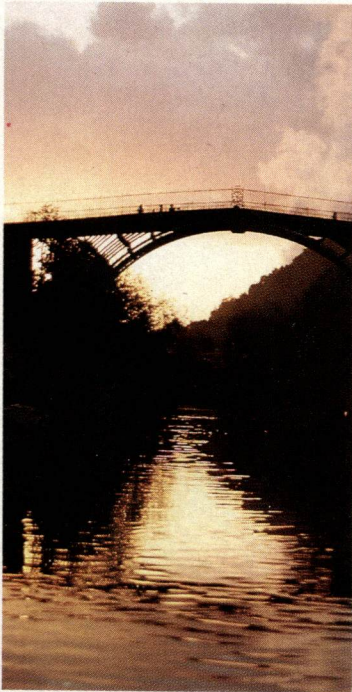
#### Reader offer

Specially produced reprints of this survey are available at £1.25 per copy, 90p to schools and universities. Price includes UK postage and packing; overseas p&p extra. Minimum order: 10 copies. Ring Sarah Gray in London on 01 839 7000 or Bradley Cleaton in New York on 212 541 5730 by 11 September to place your order.



Not what mankind chose

*M. Sakurai*



7. 10 AM "THE IRONBRIDGE"



M. SAKURAI, MAN. DIRECTOR,

RICOH UK PRODUCTS  
LTD., TELFORD.



10.12 PM "THE GEORGE & DRAGON"



T. UEMURA, MAN. DIRECTOR,

OMRON ELECTRONICS UK LTD.,  
TELFORD.

*T. Uemura*



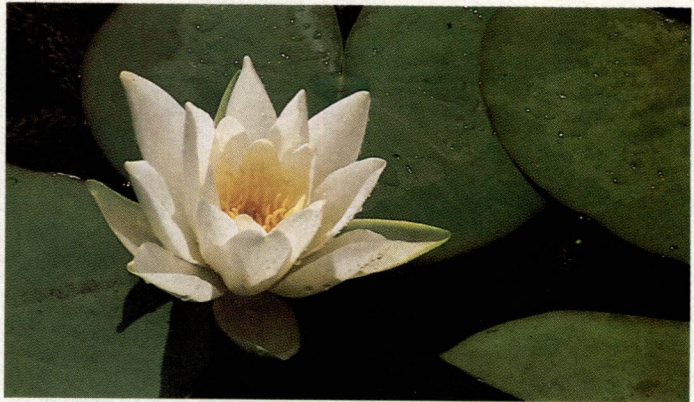
4.33 PM "COALPORT MUSEUM"



Y. YUGUCHI, MAN. DIRECTOR,

EPSON TELFORD LTD.,  
TELFORD.

*Y. Yuguchi*



10.23 AM "OBSERVING THE CHERRY GARDENS"



M. MORITA, MAN. DIRECTOR,

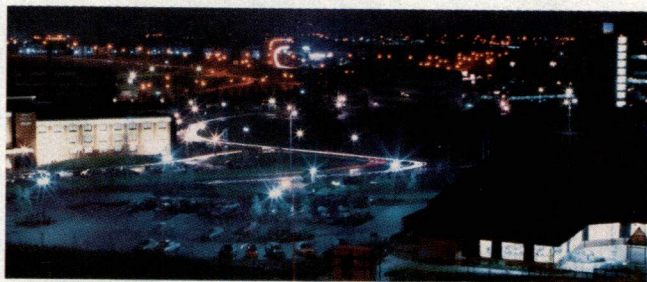
MAXELL UK LTD., TELFORD.

*M. Morita*

---

DO JAPANESE BUSINESSMEN SEE  
SOMETHING IN BRITAIN THAT YOU DON'T?

---



9.30 PM "90MM LENS. ASA 160. F22. EXPOSURE 10 MINS"



K. TAKAGI, MAN. DIRECTOR,

NIKON UK LTD., TELFORD.

*K. Takagi*

SINCE 1984, 14 MAJOR JAPANESE COMPANIES HAVE  
SET UP THEIR EUROPEAN OPERATIONS IN TELFORD.

**TELFORD**  
Shropshire  
THE SUCCESS STORY CONTINUES

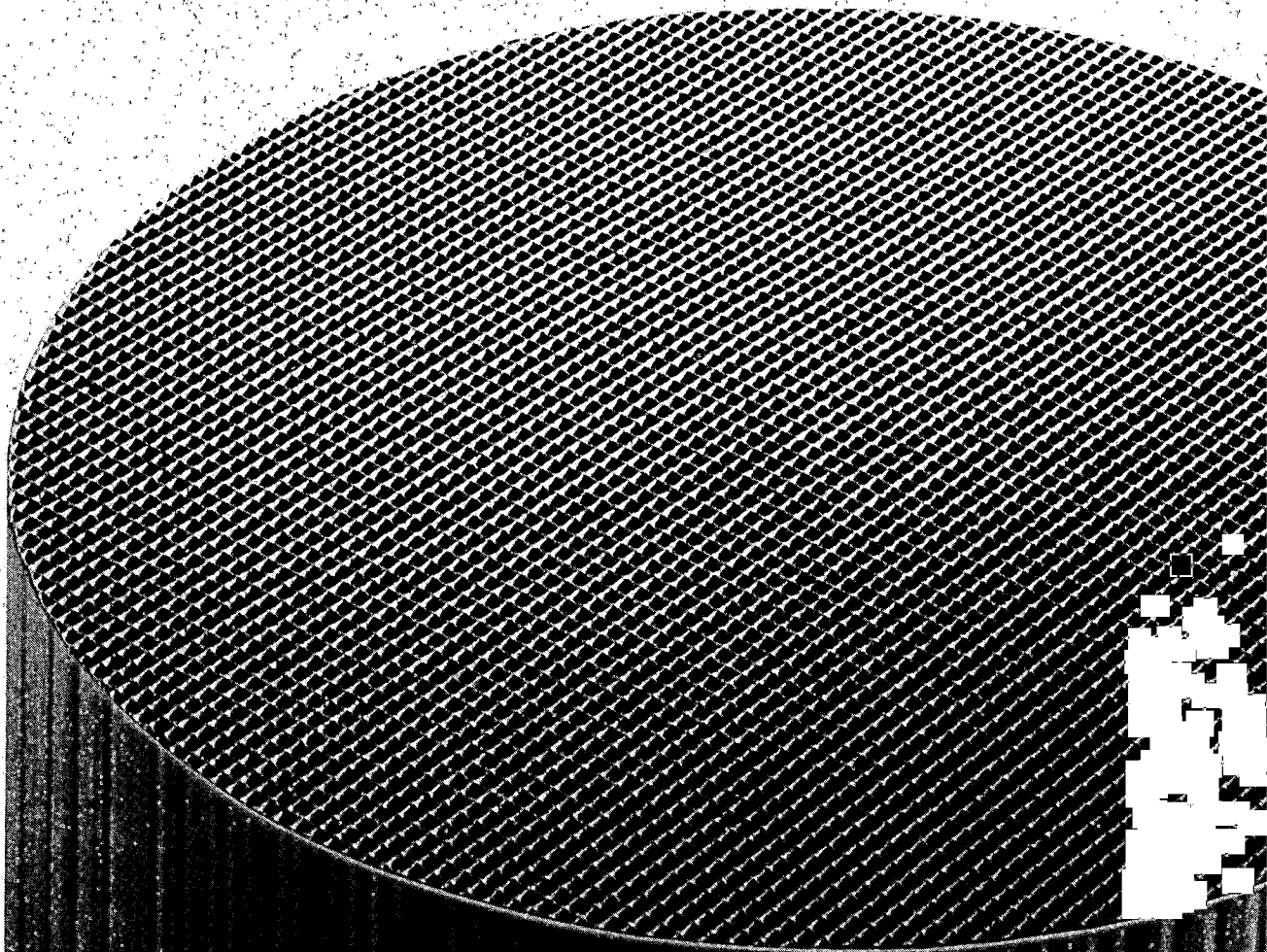
FOR THE FULL PICTURE, TAKE THE M54 TELFORD MOTORWAY OR THE TRAIN FROM EUSTON. (YOU'LL FIND TELFORD 30 MILES WEST OF BIRMINGHAM.) ALTERNATIVELY CONTACT  
CHRIS MACKRELL, COMMERCIAL DIRECTOR, TELFORD DEVELOPMENT CORPORATION, NEW TOWN HOUSE, TELFORD SQUARE, TOWN CENTRE, TELFORD, SHROPSHIRE TF3 4JS. TEL: 0952 293131.

**Chemistry  
for the Environment**

Degussa catalysts turn poisonous exhaust fumes from cars into harmless substances. 25 years ago a task for our research department. It was solved successfully. Millions of cars in many parts of the world are equipped with Degussa catalysts. Our research continues.

**Degussa** 

Metals. Chemicals. Pharmaceuticals.



# BRITAIN THIS WEEK

## Media messages

Rupert Murdoch attacked **British television's** "narrow elite... which has always thought its tastes are synonymous with quality". British television, he said, was class-ridden and backward-looking. During the time it took him to deliver his MacTaggart lecture, his Sky satellite-television company lost £17,000.

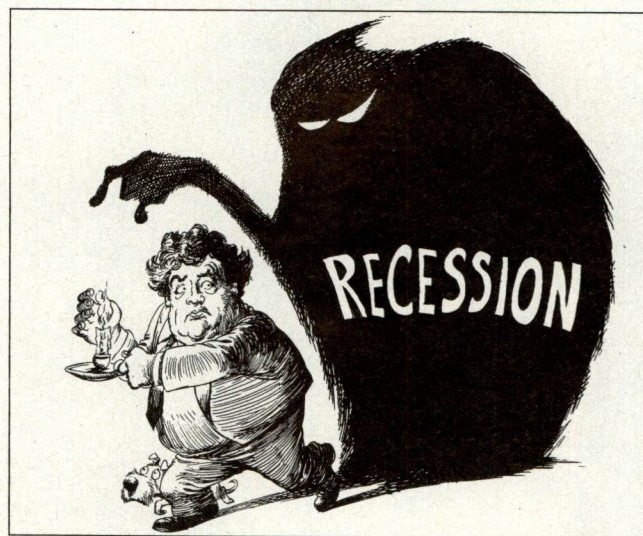
John Birt, the BBC's deputy director-general, rebutted Mr Murdoch's charge that television was backward-looking. The BBC began a series of newscasts which present the events leading up to the outbreak of the **second world war** as they might have been covered had they occurred today.

Public **water-supply** companies admitted they had spent £21.8m on a big advertising campaign. Surprisingly, they claimed that this campaign had nothing to do with the fact that they are to be sold to the public in November. (Or, as a spokesman remarked: "It has coincided with privatisation only because privatisation is happening.")

## Race and reaction

Around 750,000 people celebrated London's **Notting Hill Carnival**—the biggest of its kind outside Brazil—with the usual good humour and arrests (310 this year, most of them after the carnival finished).

Questions about the role of **race** in fostering and adopting children came to the fore after the Court of Appeal upheld a decision to remove a 17-month-old child of mixed parentage from his white foster home and place him with a black family. A health-department minister, David Mellor, demanded a report into the affair, pending legislation.



## Best-laid plans

The Ministry of Defence disclosed that Sir Francis Tombs, chairman of Rolls-Royce, is preparing a report on the management of the Atomic Weapons Establishment at Aldermaston. Its work on the **Trident** nuclear defence programme for the 1990s is badly behind schedule.

### Number of top-quality research departments

Cambridge	19	out of 26
Oxford	16	21
Imperial College, London	12	16
University College, London	11	24
Nottingham	7	27

The Universities' Funding Council published an exhaustive assessment of **university research**. Oxbridge and Imperial College, London, excelled. Grading will affect the allocation of £250m in research grants over the next five years.

The government failed in its attempt to set up a **wholesale market** for electricity, to operate after privatisation. Back to the drawing board.

Miners proposed to save the last **coal pit** in Kent by taking it over themselves.

Mixed **economic news** for Nigel Lawson: a survey by the CBI supported hopes for a "softish" landing for the economy in the fight against inflation. But a survey of 22 independent forecasts by the *Financial Times* pointed to a sharper than expected downturn in investment growth and consumer spending.

A Protestant terrorist group, the **Ulster Freedom Fighters**, claimed the security forces in Northern Ireland had given it official information about IRA suspects; the loyalists said they used the information to kill a man they thought was an IRA member.

## Once upon a time



**Henry VIII**—"that blot of blood and grease upon the History of England" (Dickens)—probably died of scurvy

and malnutrition, not overindulgence, said Susan Maclean Kybett in a magazine, *History Today*.

Buckingham Palace announced that **Princess Anne and Captain Mark Phillips** are to live separately—as they have in effect been doing for some time. The marriages of the Queen's only sister and only daughter have now both broken up.

Old rock stars never die. **The Who**, a band whose members hoped they'd die before they got old, plan a concert at London's Royal Albert Hall in October. Combined ages of the three surviving original members: 131.

## Animal magic

Britons spend £2 billion a year on pets, said a report. In this nation of animal-lovers, a video-distribution company advertised a new voodoo horror film by sending hundreds of live Chinese **rat snakes** to video shops.

A survey suggested that Britain's beloved domestic **cats** slaughter 70m smaller fry—sparrows, shrews, mice, robins, etc—every year.

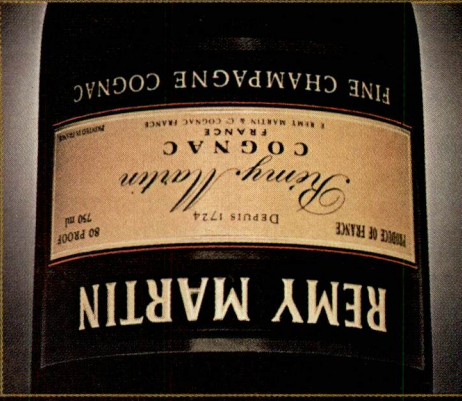


Environmental officers found that the **rat population** of Britain had increased by one-fifth last year and that no Londoner works more than 70 yards from the nearest rat. A company, Rentokil, said sales of rat poison had risen 50%.

Imported by Rémy Martin Amérique, Inc., N.Y., N.Y. 80 Proof © 1987

*Rémy*

Exclusively Fine Champagne Cognac



INDULGENT. THE SENSE OF REMY.

# BRITAIN

## The trouble with telly

THE shuttle flights were running late on August 25th. So the media wizards heading north to hear Mr Rupert Murdoch give the annual MacTaggart lecture to the Edinburgh television festival were frantic that they might miss the fun. Once they had got there, they settled down—as one of them put it—as if it was 1969, and they were a bunch of radical students about to listen to a Conservative university chancellor. They came prepared to snigger; and snigger many (but not all) of them did.

What Mr Murdoch said (see box on next page for a taster) was not particularly novel. He thinks the BBC/ITV duopoly in British television limits consumer choice; he believes that British broadcasting is in the hands of a self-perpetuating, self-congratulating élite. Plenty of people agree. What made the lecture epochal was the person giving it.

For in the past year Mr Murdoch has made history. When he was just a newspaper proprietor, albeit with 24% of Britain's newspaper sales in his stable, he was regarded as the devil only by those who looked back to a golden age of the press—when *The Times* was not just another paper and Page Three Girls had no nipples. But, since the launch of Sky television, his satellite TV service, earlier this year, a new set of adversaries thinks he has horns and a tail.

These are the men who have run television in Britain for 40 years. In the BBC, and

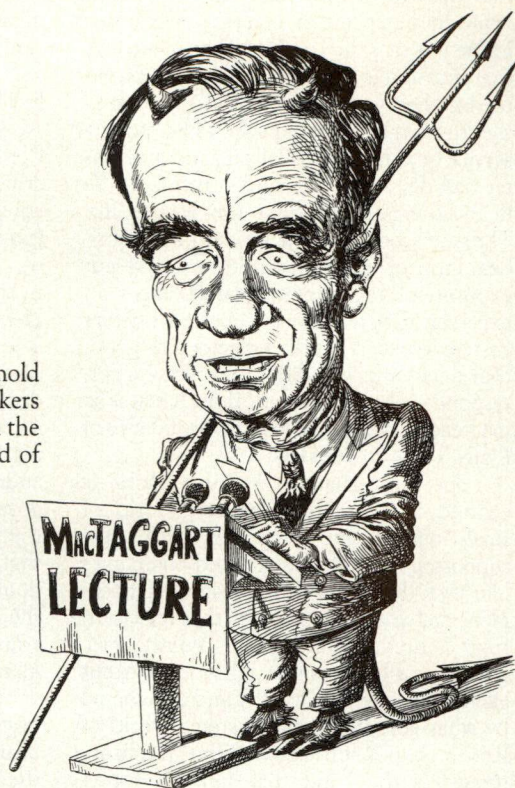
in the independent companies who hold television franchises, programme-makers have believed that their values were "in the public interest". They have been proud of their successes—lush costume drama, many original plays, some hard-hitting documentary series. They think Mr Murdoch is prepared to flood the airwaves with imported American sitcoms, inconsequential talk-shows and old films.

Mr Murdoch deliberately offended many of those listening to him. He claimed that American broadcasting had been misrepresented, insisting both that its most popular programmes were better than their British equivalents (partially true; they are certainly glossier), and that American news and current-affairs programming was more extensive than in Britain (more true than false; local television news in America, for example, is vastly better than its British counterparts).

Yet his worst enemies would find it difficult to say his speech was all fire and brimstone. Many broadcasting journalists find his Sky News channel impressive; he reiterated at Edinburgh that he has no intention of calling for the privatisation of the BBC. And, in strict business terms, Mr Murdoch hardly seems threatening; his channels have only about 1% of the British television audience, and lose more than £2m a week. So why is he considered to be so dangerous?

Because cometh the hour, cometh the man. British television has had a torrid two years, which started with the firing in 1987 of Mr Alasdair Milne, then director-general of the BBC, by his board of governors. Since Mr Milne was the embodiment of the liberal programme-makers' establishment, and since his departure was thought to have had the hand of government behind it, the old guard in the BBC took fright.

Then, in late 1988, the government unveiled its plans for the future of commercial television. These included a proposal to put the existing television companies' local franchises up for auction in 1991. Cue for cries of woe that companies would no longer want to risk spending on

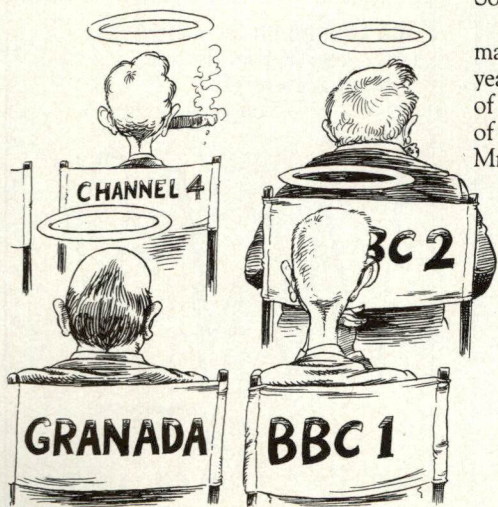


£300,000-an-hour dramas, given the real possibility of losing their franchise in the auction. Now along comes Mr Murdoch, seeming to endorse the government's scepticism about the wonders of the old system and its commitment to change (though he too opposes the auctioning of franchises). The horns and tail grew another inch.

Yet the real story behind Mr Murdoch's speech is not of a television industry united to oppose this devilment. Indeed, most of the questions after the speech affected agreement with much of what he had said. Instead, Edinburgh showed how fragmented the television industry has become. At least four groups are now evident. Each has a different vision of the future.

First, and still perhaps most numerous, are the **Modern Reithians**, the people who redefined British broadcasting in the 1960s, and who would like things in the 1990s to be as they used to be. The BBC would depend for financing solely on its licence fee; it would make lots of programmes that challenged the conventional wisdom—either of the government, or of society at large. The independent companies would win franchises by promising "quality" programming, and lose them if they failed to deliver. This is the group that feels most embattled at the BBC, but it still dominates the attitude of big independent companies such as Thames and (especially) Granada. Its most articulate exponents are—bizarrely—journalists who write about broadcasting.

The second group are the **New Worthies**, epitomised by Mr John Birt, brought



into the BBC as its deputy director-general from an independent company when Mr Milne was sacked. The New Worthies think that British television has much to be proud of, but has grown complacent. The BBC, they say, has never asked itself what "public-service broadcasting" really means, and better had do, soon, if it is to continue to be financed mainly through the licence fee. They are scornful of the Modern Reithians' definition of quality—one that would put exposure of, say, a minor scandal above an explanation of how the European Monetary System works. If British TV news is so good, they might ask, why did it never have a correspondent based in Japan? If the BBC was so marvellous, why had it lost the confidence of *Daily Telegraph* readers?

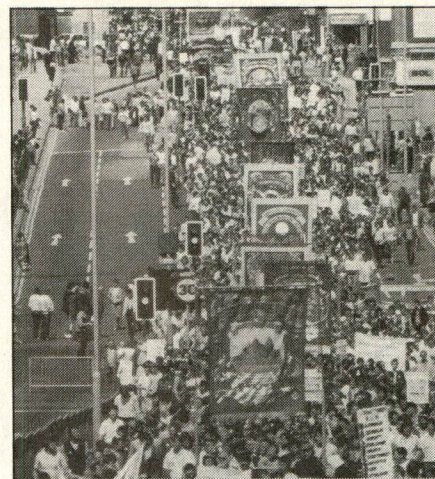
The third group—the **Soho Mob**—is centred in the cottage-industry world of small independent companies, with some supporters in both the BBC and companies like LWT. It finds the television establishment naff and boring. It says that television sport is tired. It wants more "youth" programmes; it believes that television current affairs is insufferably worthy and dominated by what goes on in the besuited world of British politics. It thinks that the "public interest" is the band that Johnny Rotten founded after he left the Sex Pistols. It would like more of the BBC's and the big independents' output to be put together by small companies. A symbolic standard-bearer for this tendency might be Ms Janet Street-Porter, head of youth programming at the BBC—and the person who invited Mr Murdoch to Edinburgh.

And that leaves the fourth group—the **Deregulators**, admirers of America, for whom Mr Murdoch speaks. But, as this

analysis suggests, his views are far from being the only source of tension within television. Old BBC hands spent much of last year in a malevolent campaign against Mr Birt. Executives at Granada, whose "World in Action" programme is all that the Modern Reithians hold dear, bitterly and publicly criticised LWT's decision to replace the equally worthy "Weekend World" with the jazzy, Soho Mob-inspired "Eyewitness".

Arguably, the weakest position is shared by the groups who like each other least—the Deregulators and the Modern Reithians. The latter have had their day. The BBC, discovering modern management about a decade after the rest of the public sector did so, will never again let its programme makers do what they want, and to hell with the audience. It knows that it will not convince a government—of any colour—to let it keep the licence fee in the mid-1990s if it does that. Even in Granada's Manchester redoubt, the sound of accountants tapping their calculators can be heard as the company prepares to bid for its franchise once more.

Yet the Deregulators' future looks no brighter. Mr Murdoch may, as some insist, be able to sustain Sky's losses for years. But the government has made clear that a market-driven free-for-all is not its policy. The prime minister will not have porn on British screens; the European Community (without much British opposition) will limit American imports into its single market. Cable has been a flop. The battle is in the middle ground; it is not men like Mr Murdoch and Mr Milne who will determine what British television will look like in the next decade, but Mr Birt and Ms Street-Porter.



Restrictive practice: no marchers on left

Trade unions

Good, bad or indifferent?

"UNIONS do not reduce the growth of productivity or employment... union firms experienced faster productivity growth during 1980-84 [than did non-union firms]," says the press release accompanying some much-publicised new studies from the London School of Economics's Centre for Labour Economics. Now listen to the government's white paper, "Employment for the 1990s": "Recent research shows that trade unions... tended to push up the earnings of people they represented while blocking the improvements in productivity which are needed to pay for these higher earnings." Has the LSE, with one blow from an academic pamphlet, knocked the stuffing out of the arguments behind the government's attack on unions?

The LSE work on productivity growth looks at figures for 127 firms in England and Wales from 1973 to 1986. The researchers

Some of what he said

"THE television set of the future will be... a global cornucopia of programming and nearly infinite libraries of data, education and entertainment... The arguments which have recently dominated British broadcasting, such as multi-channel choice versus public-service duopoly, will soon sound as if they belong to the Stone Age..."

For 50 years British television has operated on the assumption that the people could not be trusted to watch what they wanted to watch, so that it had to be controlled by like-minded people who knew what was good for us... And it was done in a way which was very appealing to the British establishment, with its dislike of money-making and its notion that public service is the preserve of paternalists...

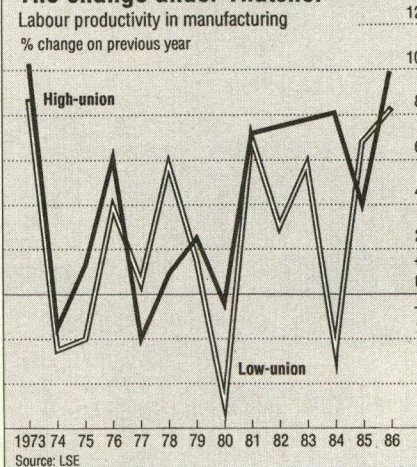
Much of what is claimed to be quality

television here is no more than the parading of the prejudices and interests of [these people]... [and] has had, in my view, debilitating effects on British society, by producing a TV output which is so often obsessed with class, dominated by anti-commercial attitudes and with a tendency to hark back to the past...

What I am arguing for is a move from the current system of public broadcasting, in which market considerations are marginal, to a market system in which public broadcasting would be part of the market mix.

As in newspapers, so in television; [News International's] role is that of a monopoly destroyer, not a monopolist... And the campaign orchestrated by our rivals... is a cynical effort to win in the political arena what has been lost in the marketplace."

The change under Thatcher



maintain that there was "no significant difference" in average productivity growth between union and non-union firms during the 1970s; but during the early 1980s, they say, the productivity of workers in unionised firms grew faster than did that of workers in non-unionised firms.

Watch out. Academic papers can be read in many ways. This latest work looks at growth, not levels, of productivity. Studies on productivity levels tell a different story. In the LSE's spring bulletin, the school's professor of industrial relations, Mr David Metcalfe, surveyed recent work: studies covering the late 1970s and early 1980s link unionisation to lower productivity levels, while one survey conducted in the mid-1980s shows no particular link. Of a study on the engineering industry from 1978 to 1982 he writes, "the key finding is that union presence reduces labour productivity substantially in large firms. This effect is especially strong if there is a closed shop."

Mr Sushil Wadhvani, one of the latest batch of researchers, admitted in discussing the papers that previous research connects lower productivity levels to unionisation: "somewhere in the dim and distant past," he said, "restrictive practices did impact on productivity." The new papers' evidence, he argued, shows that unionisation does not prevent companies from improving their workers' productivity: the data in them concentrate on growth in productivity, irrespective of levels.

Read one way, the new studies' figures for the early 1980s suggest that unionisation may actually have helped to boost labour productivity in those years. Certainly, in 1980-84 productivity in unionised firms rose faster than in non-unionised firms.

Read another way, with those lower productivity levels in mind, the figures suggest something quite different. Unionised firms, whose productivity had in the past been held down by restrictive practices, had more scope for improvement than did non-unionised ones. So, in the years when unionised firms were catching up, their productivity growth curve bounced up above that of non-unionised companies.

The results then become unsurprising. Union power was under attack in the early 1980s. It would be odd if, with union power weakening, the differences between unionised and non-unionised companies did not shrink. That is what seems to have happened during those years.

The LSE papers, in short, do not undermine the government's attack on union power. Rather, they support the view that weaker unions mean faster productivity growth. On the other hand, they also contradict those who believe that unions are always bad for productivity. Unions are rather like alcohol: it isn't their presence that matters, but their strength.



How a lager lout turns into a lager snob

## Drinking habits

# From strength to strength

The fastest-growing bit of the drinks market is lager. Behind its growth lurks a polarisation of drinking habits

BRITAIN'S 39m boozers are turning to stronger drink. Most pubs have one or more strong lagers on tap; the shelves of off-licences groan with cans marked "strong" or "extra strong"; and advertisements trumpet the strength—or "bite" in ad-speak—of rival brands. A cursory inspection of the discarded cans which litter most city streets suggests that the tide of strong lager is becoming a flood.

The strongest of the range are known in the trade as "super-strongs". For once, this is not mere hype: a 99p can carries a punch equivalent to two-and-a-half pints of bitter, four glasses of wine, or four measures of whisky; oblivion is guaranteed for less than £5. Last year almost 600,000 barrels of the stuff went down British throats, earning some £140m for the breweries.

Carlsberg Special Brew (the one in the bright gold cans) is the best-seller of the super-strongs: with 9% alcohol by volume, it has 65% of the market and an advertising budget of £2.64m a year. Its nearest rival is Tennent's Super Blue. Other manufactur-

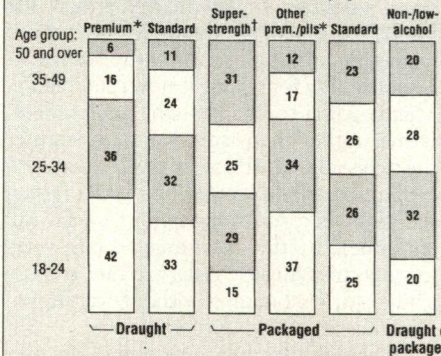
ers—notably Allied Lyons with Skol 1080, and Scottish & Newcastle with Kestrel Super Strength—are trying to muscle in on this expanding part of the market.

Super-strong lagers suffer from something of an image problem. Accosted by tramps clutching gold or blue cans and requesting a pound for a cup of tea, the average commuter regards them as the drink of choice for the down-and-out. Not so, says Carlsberg: Special Brew is popular with the up-and-coming as well. Certainly, anecdotal evidence suggests that super-strongs are making converts among the young. Cans of Special Brew and Super Blue seemed almost a part of the costumes at last week's Notting Hill Carnival.

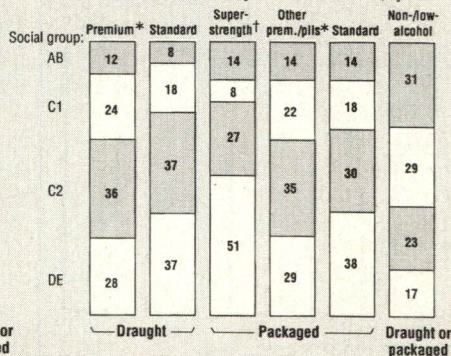
Even more exciting from the brewers' point of view is demand for the next strength down: "strong" or, as it is coyly known in the trade, "premium" lager. Ten years ago only one in ten pints drunk was a strong lager. Today the figure is one in four. Most breweries have a prized premium lager, with Tennent's Extra (Bass), Stella Ar-

## Where the lager goes

% of volume consumed, year to end-June 1989, by age



% of volume consumed, year to end-June 1989, by class



Source: Public Attitude Surveys

\* Original gravity 1040<sup>+</sup>

† Skol 1080, Tennent's Super, Carlsberg Special Brew, Kestrel Super Strength

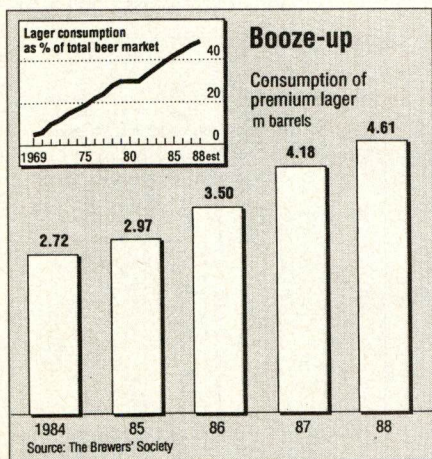
tois (Whitbread's) and Löwenbräu (Allied) leading the field. Premium lagers have been particularly successful in the take-home trade. Both market researchers and the brewers, who are investing millions in advertising premium brands, believe that strong lagers will remain the best moneyspinner in the entire British beer market for some years yet.

Mintel, a market analyst, argues that the popularity of strong lagers reflects the growing sophistication of the British consumer. As the lager market continues to segment, affluent and image-conscious consumers are voting with their elbows, abandoning fizzy, generic products for more distinctive brands.

The taste for stronger lagers is encouraged by the fashion for expensive international brands with Germanic names and Gothic print on the labels. Foreign lagers, which have always been stronger than their British counterparts, with an average alcohol content of 5% rather than 3%, are readily available in Britain's supermarkets. As the watered-down recommendations on tied houses of the Monopolies and Mergers Commission begin to take effect, these foreign brews seem bound to increase their sales in British pubs.

Other consumers are attracted not so much by quality as by alcoholic content—the "bite". Lager louts usually know which brands offer the quickest way to get cheaply drunk. Even if they did not know in the past, they do now. Urged on by the health lobby, the EEC now has a rule that all brands should give their alcoholic strength on the label. This has proved a boon for serious drinkers.

The brewers—and the Brewers' Society in particular—are cagey when asked about strong lagers: much better, they say, to concentrate on "nablabs": no-alcohol and low-alcohol beers. But nablabs still have a minute share of the market. Encouraged by some of the most sophisticated advertising around, both lager-louts and lager-snobs are shifting to stronger brews.



Nice pictures, shame about the roof

### National Gallery

## Post-Whitehall modernism

**The government has pushed London's flagship gallery into relying heavily on its own financial resources. As it is unwilling to charge for admission, it needs others ways of making ends meet**

SIR ROBERT PEEL championed the National Gallery in 1832 for a good reason: more public appreciation of great art, he thought, would help soothe class conflict. Those who run it now still believe in the civilising mission of London's top gallery and are proud of its policy of free admission. But today they have another mission, too: reconciling that policy with the costs of maintaining a huge building in Trafalgar Square.

Until April 1988 that job was done by the Property Services Agency (PSA), a section of the Department of the Environment. The arrangement worked badly: Whitehall predictably shelved all but the most urgent repairs. Now the gallery has been made responsible for its own upkeep. That has been equally disastrous.

Part of the problem is that the Crown remains the gallery's freeholder. So the National's trustees, under their chairman, Mr Jacob Rothschild, see themselves as just the managers of the cash—with no more responsibility for raising it now than before. This is going to change. The government, sooner rather than later, wants to transfer the freehold to the trustees, giving them ultimate responsibility for spending and raising the gallery's cash (though grants-in-aid will continue). In the meantime, the government is chivvying the gallery to take responsibility for its building without waiting on legal niceties.

There is a big job to be done. The government's maintenance grant is only £3m a

year; the repairs inherited from the PSA will cost perhaps £22m. To redecorate one large room of the gallery, with modern lighting and climate controls, can cost more than £1m. Yet the amounts raised by the National from private sources to supplement the government's grant are relatively meagre (perhaps £1m since last summer, when Mr Walter Annenberg, a former American ambassador to Britain, donated \$5m).

The result: one of the best collections of paintings in the world is threatened by a lack of proper air-conditioning. And the backlog of maintenance work is rising: a large number of rooms are now closed to the public and the roof, damaged by the hot, dry summer, is leaking terribly. (An August thunderstorm sent staff scurrying around the Titians with buckets and plastic sheets, to the amazement of foreign tourists.)

While the National cannot cover its maintenance costs, the government picks up the bill for most of its other running costs. These come to about £6m a year, and are met largely by a government grant of £5m, emphatically earmarked for current spending. (The deficit is met out of various private sources.) This running-cost grant—adjusted to exclude cash for maintenance staff and for pensions—has increased in real terms by almost 40% since 1979. Staff numbers have risen by only 9% in ten years; but there has been a substantial fall in the number of warders (partly because of room closures) and the modest overall increase conceals a near-doubling of professional and adminis-

# Cathay Pacific Airways Limited

## 1989 Interim Results — Highlights

### Results

The unaudited consolidated results of Cathay Pacific Airways Limited for the six months ended 30th June 1989 were:

	Six months ended 30th June		Year ended 31st December
	1989 HK\$M	1988 HK\$M	1988 HK\$M
Turnover	<u>8,255.2</u>	<u>6,947.1</u>	<u>15,097.7</u>
Operating profit	<u>1,569.2</u>	<u>1,658.2</u>	<u>3,750.8</u>
Net finance charges	<u>24.7</u>	<u>418.2</u>	<u>564.8</u>
Net operating profit	<u>1,544.5</u>	<u>1,240.0</u>	<u>3,186.0</u>
Share of profits of associated companies	<u>48.4</u>	<u>45.4</u>	<u>99.7</u>
Profit before taxation	<u>1,592.9</u>	<u>1,285.4</u>	<u>3,285.7</u>
Taxation	<u>222.5</u>	<u>256.4</u>	<u>446.9</u>
Profit after taxation	<u>1,370.4</u>	<u>1,029.0</u>	<u>2,838.8</u>
Minority interest	<u>7.0</u>	<u>7.7</u>	<u>15.1</u>
Profit attributable to shareholders	<u>1,363.4</u>	<u>1,021.3</u>	<u>2,823.7</u>
Dividend	<u>300.8</u>	<u>257.8</u>	<u>1,031.2</u>
Retained profit	<u>1,062.6</u>	<u>763.5</u>	<u>1,792.5</u>
Earnings per share	<u>47.6c</u>	<u>35.7c</u>	<u>98.6c</u>
Dividend per share	<u>10.5c</u>	<u>9.0c</u>	<u>36.0c</u>

### Interim dividend

The directors of Cathay Pacific Airways Limited have today declared an interim dividend for 1989 of 10.5c per share.

The interim dividend will be paid on 29th September 1989 to shareholders registered at the close of business on 22nd September 1989; the share register will be closed from 16th September 1989 to 22nd September 1989, both dates inclusive.

### Prospects

The recent strength of the Hong Kong dollar against many of the other currencies in which most of the airline's revenues are earned will have an adverse effect for as long as the situation continues. Increasing costs will also affect profitability in the second half of the current year. In addition, although regional traffic demand is being sustained generally at high levels, there has been a slight impact on some services caused by the recent events in China. In all the circumstances, the results for the full year must be viewed with caution and any improvement over the 1988 levels of profitability is likely to be modest.

The full interim report will be sent to all shareholders on 5th September 1989.

D.A. Gledhill  
Chairman

Hong Kong, 23rd August 1989



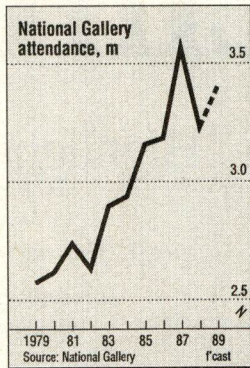
The Swire Group

CATHAY PACIFIC

trative staff. But the taxpayer has been getting good value from the gallery. The number of visitors has risen sharply in the past ten years (see chart), leaving running costs per head broadly unchanged in 1989 pounds at around £1.40.

The task now facing the National's director, Mr Neil MacGregor, is to find new sources of cash. Admission charges are out, mainly because the gallery does not believe in them but partly because it doubts whether they would raise much cash. In most cases where gallery admission charges have been newly introduced, they have cut the number of visitors by about 60%. Suppose a charge of £2 a head cut the gallery's visitors from about 3.5m to about 1.5m. After taking into account season tickets, pensioner reductions and the like, the gallery might raise gross revenues of £1.5m. The extra staff and equipment involved might cost £300,000 a year. Donations, claims the gallery, would almost certainly go down and profits from the shop and the restaurant would be badly hit. The net benefit to the gallery might be as little as £200,000.

What about stepping up donations? The National is already the most successful of the country's leading galleries in this respect. But donations have done little to cover refurbishment costs. A new wing, rumoured



to cost £30m and due to open in 1991, has been paid for by the Sainsbury family of supermarket fame; but their generosity covers the building costs, not those of running and maintaining the extension. (The government undertook to meet these in 1987.) And a capital endowment from Mr J. Paul Getty Jr has been invested to produce perhaps £2m a year which—together with a £3m annual grant from the government—can in general be used only for buying paintings.

So what can the gallery do to help itself? Here are some suggestions:

- Even after some big improvements, the explanatory material next to the paintings is limited and confusing. Gallery lecture tours are available only to a small number of those tramping the halls. An extensive, expensive gallery tour aimed at the well-intentioned-but-overwhelmed might be a money-spinner.

- The gallery appears to know next to nothing about its visitors. Its director is fervently anti-elitist; those who work there believe it already draws its visitors from all social backgrounds. But there is little market research to prove this view. Research might throw up some ideas for adding value to the gallery's current activities—and might even strengthen the case for additional public cash.

- As it is, this cash looks oddly structured. The purchase grant is about £3m a year. Even though it can be boosted by special tax concessions—the private-treaty sale system open to all state galleries—such a purse will not buy much in today's art market. Perhaps the gallery should ask for its purchase grant to be switched to building repairs. Gallery staff believe new acquisitions are important in pulling in the public, and in encouraging support from private benefactors. But what price a new picture if its future home lets in the rain?

- The trustees still take an uncommercial view of the gallery's shop and restaurant. They are supposed to be free-standing businesses, but their space is provided at a nominal rent and their "profitability" depends largely on this subsidy. The restaurant is a modest affair, modestly priced—presumably so that poorer visitors are not deterred from the gallery by the price of a cuppa. The National's shop eschews tee-shirts and other vulgarities that might cheapen its collection of postcards and reproductions. But the Tate, London's second most famous gallery, has a splendid restaurant that packs them in and is not cheap. Could not the National copy it?

Only since 1980 has the National been able to take on new staff without asking them first to sign the Official Secrets Act. Further changes lie ahead if the gallery is to emerge successfully from its days as a grand corner of the civil service.

## Ginza Street, W1

ONE in 30 of Britain's foreign visitors is Japanese. Walk down Oxford Street and you might think it was one in three. Japanese tourists have always been more noticeable than, say, the Swiss (who are almost as numerous)—partly because of their appearance, partly because of their tendency to cluster in large groups in the West End. Their visibility has fuelled the interest of the popular press in an easily mockable race whose visits to Britain have doubled in three years. The British Tourist Authority (BTA) is more interested in the potential revenues they represent: its boffins are studying how tourists with the idiosyncratic travelling habits of the Japanese might make a bigger contribution to reducing the trade deficit.

A recent article in the *Daily Telegraph* cited hotel complaints that Japanese tourists had caused floods by running baths until they overflowed. This, coming at the height of the water shortage, was a gift to the tabloids: "Nips are drips!" said the *Sun*. In a country with relatively few oriental immigrants, poking fun at rich foreign

yellows is still considered fair game.

The BTA would prefer the tourist industry to follow the lead set by Wales. The principality's tourist board launched a campaign at an exhibition in Japan on August 25th, selling tours of the Welsh castles and Snowdonia in a joint-venture with Cathay Pacific Airways. The BTA itself has sponsored 60 visits by Japanese journalists this year, trying to convince them that Britain should no longer be seen by Japanese tour operators as a remote, shabby part of Europe with poor food. And it wants first-time Japanese visitors to Europe who pay a fleeting visit to London to come back for longer next time and see more of the provinces.

Many are more interested in London's shopping. Last year 40% of Japanese tourists in Britain were women between 16 and 35. Female office-workers come to Europe to buy trendy western goods that would cost far more back home. The trouble with London is that its department stores are unfamiliar and nobody speaks Japanese. So a dozen Japanese-owned



shops have sprung up, where Japanese saleswomen sell Burberry coats, Wedgwood china and chintzy toiletries like soap coloured with Beatrix Potter illustrations—all at big mark-ups. The best-known, Mitsukoshi on Regent Street, had an astonishing £24.5m turnover last year—13% of the BTA's estimate of all spending by Japanese tourists in Britain. But the profits go winging back to Japan. With a bit more cunning, some British retailers could be a lot richer.

# BUSINESS THIS WEEK

## Finance

**Mitsui Bank** and **Taiyo Kobe Bank** agreed to merge next April, in Japan's first big banking marriage for 16 years. The couple will become the world's second-largest commercial bank, measured by assets. The move follows the decision by Japan's finance ministry to encourage competition among retail banks and the deregulation of deposit rates.

The **Swiss Cartel Commission** wants to force through proposals which aim to bust the country's cosy big-bank syndicate. In July the 22 members of the underwriting syndicate unsurprisingly criticised the plan.

Moody's, an American credit-rating agency, gave **Australia** a vote of no confidence because of its huge net external debt, equal to 33% of GDP, and its chronic current-account deficit, now 5.2% of GDP. Australia's credit rating is now below Denmark's and Norway's.

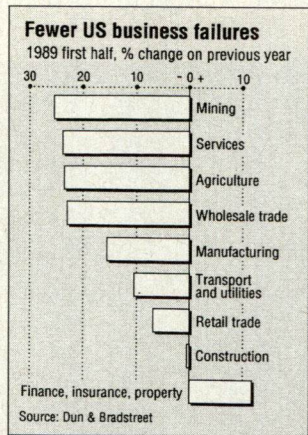
America's largest bank, **Citicorp**, agreed to pump fresh money into Mexico because it believes the country's economy is recovering. By contrast, three big British banks have reduced their Mexican exposures. At least a quarter of Mexico's creditors must put up new money if the Brady plan is to succeed.

## Out of business

America's Court of Claims has barred the Energy Department from awarding a \$1 billion contract to a consortium led by **Bechtel**. The construction firm sells systems and technology for disposal of nuclear waste.

**Resorts International**, which pioneered casino gambling in Atlantic City, faces possible

bankruptcy proceedings after defaulting on \$925m-worth of junk bonds.



Since 1987 the number of **bankruptcies** in America has been in decline. In the first six months of 1989 the figure fell by 14.5%, the biggest drop in more than a decade. Only finance, insurance and property saw an increase in business failures.

The **South Korean** government approved a billion-dollar rescue plan for three ailing shipbuilders: Daewoo, Korea Shipbuilding and Incheon. South Korea is the world's second-biggest shipbuilder, after Japan.

**Australia's domestic flights** were grounded after pilots walked out over a pay dispute.

## People

**Jerome Kohlberg**, a founder of Kohlberg Kravis Roberts who left America's leading concocter of leveraged buy-outs in 1987, is suing his two former partners. They are accused of being too greedy—at Kohlberg's expense.

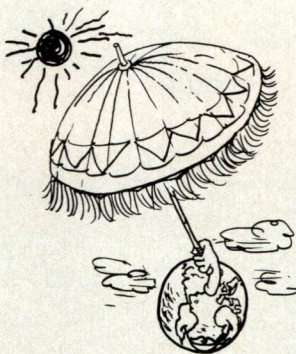
**Leona Helmsley**, the billionaire head of the Helmsley hotel empire, was found guilty in a New York court of evading millions of dollars in taxes. She thought that only "the little people pay

taxes". Suggested sentence: 20 years in one of her own hotels, on room service and water.



**Alain Chevalier**, one of France's most respected businessmen who recently became unemployed after losing a boardroom battle at LVMH, a champagne and bags group, is to buy the Pierre Balmain fashion and perfume house. He hopes to boost Balmain's profit by developing its prestige businesses.

## Grand follies



A Swiss scientist has developed a solution to the **greenhouse effect** that may warm up the earth: a sunshade, half the size of America, to be unfurled in space. The likely cost? Around 6% of the world's GNP for the next 20 years.

A Japanese group, including prominent scientists and politicians, proposed the construction of a \$25 billion navigable **waterway through Nicaragua** as a substitute for the Panama Canal.

## Bids and deals

More bid activity among **airlines in America**. AMR, parent of American Airlines, hired two investment bankers to prepare an anti-takeover defence. Several groups are talking to Texas Air about the possibility of buying its subsidiary, Continental Airlines: Pan Am said it is thinking about making an offer; Scandinavian Airlines System and other unnamed partners are also interested.

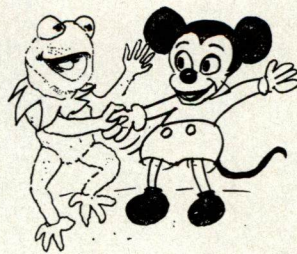
**Stellar Computer** and **Ardent Computer**, two of America's most talked-about start-ups, plan to merge.

Sweden's **Ericsson** and America's **General Electric** have agreed to form a joint venture in North America to sell cellular phones. The venture hopes for yearly sales of \$1 billion.

The board of **Falconbridge**, a Canadian mining group, supported the \$1.8 billion bid made for it jointly by Noranda, a local firm, and Sweden's Trelleborg.

## High on the hog

The price of American **pork bellies** soared as farmers lobby to send the food as aid to Poland. Meanwhile American trade regulators ruled that imported Canadian pork is injuring the business of local producers.



Mickey Mouse has shaken hands with Kermit the Frog. **Walt Disney** has bought the rights to Muppet puppets for some \$100m.

# THEY ALSO STREAMLINED THEIR COMMUNICATIONS NETWORK.

Ford demanded a communications network as sleek and purposeful as their designs. What's more, it had to measure up to Ford's total commitment to quality.

One system met these needs perfectly: Northern Telecom's *Meridian Digital Centrex* from Michigan Bell. Capable of 2.5 million calls a month, Ford's network links 21 locations ranging from data centers to factory floors to their World Headquarters. For Ford, it adds up to both higher quality and more reliable service at less cost.

You can have similar results, no matter what size your network. Call us at 1-800-543-9806. And get things rolling.

**nt** northern  
telecom



**NORTHERN TELECOM**

THE POWER BEHIND NETWORKING™



## Trust the trust, or bust the trust?

NEW YORK

SO OFTEN criticised for doing nothing, the Bush administration claims it is ready to do battle with a potentially formidable foe: big business. Mr Reagan virtually suspended the nation's antitrust laws by cheerfully failing to enforce them. Accustomed to doing whatever they want, big American companies will not take kindly to the new administration's plans to end that neglect. Undaunted, Mr James Rill, the Harvard lawyer recently appointed head of the Justice Department's antitrust division, promises strictly to enforce the law.

Mr Rill is warning businessmen that he will examine with an eagle eye all moves that threaten to reduce competition, particularly zillion-dollar mergers. And yet, in some ways, the Bushmen want to make America's antitrust practices even more permissive than they were in the laissez-faire Reagan years, when the staff of the antitrust division was cut by three-fifths.

The contradiction is more apparent than real. Most businessmen say American antitrust laws and practices need reforming. Interested lawyers and academics agree. The laws date back to the efforts of the Cleveland, Roosevelt and Taft administrations to curb the excesses of the robber barons. American manufacturers then worked within an almost self-contained economy. Today they have to compete in a world market-

place. Antitrust laws need to be amended to recognise that change. Mr Dick Thornburgh, the attorney-general, aptly summarises the thrust of the new policy when he says that the Justice Department supports the vigorous enforcement of antitrust laws but "sometimes the laws must be modified to remain true to their goal."

The main candidates for loosening are the antitrust regulations curbing collaboration between American companies. The National Co-operative Research Act of 1984 went some way in that direction. It exempts companies engaged in joint R&D projects from some antitrust provisions. By this summer 134 joint ventures were registered under this act and so shielded against civil antitrust suits seeking triple damages.

Joint manufacturing and marketing deals, however, enjoy no such exemption. Most businessmen think that this is a mistake. They say that, in practice, American antitrust laws make it much easier for them to collaborate with foreign firms than with American ones. They point to Hewlett-Packard's "strategic alliances" with Samsung, Hitachi, Canon, Yokogawa, Northern Telecom and Sony, and to the joint manufacturing plant that General Motors and Toyota have set up in California.

The business lobby is winning its case. The curbs on collaboration among Ameri-

can firms are likely to be further relaxed. But by how much depends, as usual, on who comes out on top in Washington. Many in Congress, egged on by the Commerce Department, are convinced that the antitrust laws are a ball-and-chain on American companies competing against foreigners.

The Justice Department is more circumspect. In an article he wrote shortly after Mr Bush was elected president, Mr Thornburgh suggested that Congress should empower the government to permit joint production ventures that did not threaten competition and then subject such ventures to periodic review. As a less bureaucratic alternative, Mr Thornburgh more sensibly suggested that Congress could prohibit a court from condemning a joint venture without first considering how the venture might help America's ability to compete internationally. That is not a factor courts are currently obliged to take into account.

Easy to say that America's antitrust laws should be updated, but hard to do. The influence of fundamentalists who want all antitrust laws abolished is waning fast. Mainstream economists agree that such abuses as price-fixing, market-sharing and bid-rigging cannot be left to the market to sort out. Whether the antitrust laws should also continue to block joint production and marketing ventures is more controversial.

Those who say yes fear that the campaign to amend admittedly outdated antitrust laws will be used to usher in an American industrial policy through the back door. They fret that some production consortia will reduce competition in the American market. An example commonly cited is the formation of U.S. Memories by IBM and six

## Hot air over Moscow

THE Montgolfier brothers thought it was a great way to fly. Some 200 years later hot-air balloons still drift across capitalist skies. Now the Russians are keen on getting high in wicker baskets. Initially Mr Don Cameron, a British balloon-maker, wanted simply to get permission to fly a hot-air balloon from Britain to Leningrad. After discussions with Russian officials, one thing led to another. First Mr Cameron helped organise the Soviet Union's first hot-air-balloon meeting earlier this year. Now he is launching a joint venture to manufacture hot-air balloons in Moscow.

The Russian venture aims to produce 50 hot-air balloons in its first year. Some will be used by Russian youth organisations. The state tour operator, Intourist, has also placed an order for three balloons to provide tourist trips over Leningrad.

Mr Cameron's company, Cameron



Into the red sky

Balloons, was established in Bristol in 1968. Since then it has swollen to become the world's biggest hot-air balloon maker. Thanks partly to an American factory at Dexter, Michigan, it has annual sales of some 500 balloons a year worth around £5m (\$8m).

The boom in hot-air ballooning has taken off because, with a little marketing savvy, a balloonist can turn an enjoyable pastime into a profitable one. Once airborne, a balloon represents a big blob in the sky which can be sold as advertising space. Companies can emblazon their name on it. More daringly, Cameron will also make balloons in the shape of companies' products—ranging from lorries to ice-cream cones. Mr Malcolm Forbes, America's magazine egomaniac, has a balloon shaped like his French chateau. After that, a balloon for the most famous office worker in the Kremlin should be easy.

other companies to make advanced dynamic random access memory chips (DRAMs). This consortium is supposed to help American companies catch up with their Japanese rivals. But it also provokes pointed questions. Why does IBM, a company with 390,000 employees, annual sales of \$60 billion and annual profits of \$5.8 billion, need corporate allies to compete? Won't they, like the young lady of Riga, end up inside the tiger? What precisely are the "vital national defence" interests that U.S. Memories is supposed to safeguard? Have not those same words been used by almost every protectionist scoundrel, from the steel industry to coastal shipping, to justify discrimination against foreign competitors?

The stated determination of Mr Rill vigorously to enforce the antitrust laws on corporate mergers is arousing more ribaldry than opposition. It does not take a long memory to recall that on mergers Mr Reagan's trustbusters talked loudly and carried a small stick. If any of the massive combinations of the Reagan years were uncompetitive, the trustbusters failed to spot them. Instead they tried to cover up their lassitude by pointing to the number of criminal cases the antitrust division had filed. In fact, most of these cases involved petty business conspirators engaged in bottling, road building and other local pursuits. "What the antitrust division has done is to hunt rabbits while lusty elephants have been roaming," is

how one economist put it.

Neither Main Street nor Wall Street will take Mr Rill seriously until his trustbusters show that they will really come down hard on anti-competitive behaviour by big business. Precedent suggests that the way to do this is to launch several big investigations of possible breaches of the antitrust laws. Mr Rill has already put the frighteners on the airline industry. Delta Air Lines and American Airlines have backed away from a deal for a joint reservation system. But to convince the sceptics, something more spectacular is needed.

Walt Disney's seemingly insatiable ap-



Early antitrust enforcement

petite for new material and characters for its theme parks is also worth a hard look. Disney's acquisition of Henson Associates, the company that created and owns the Muppets, follows its acquisition of the rights to use MGM's logo and most of its library at its MGM-Disney Studios theme park near Orlando in Florida. Rival MCA is outraged. It accuses Disney of landing low blows in trying to deter MCA from opening its movie park, Universal Studios Florida, next year.

The food industry presents another appetising target for Mr Rill's trustbusters. A succession of huge mergers means that thousands of brand-name grocery products in the supermarkets are controlled by a few food giants. Has competition declined, and profit margins widened, as a consequence? It is the sort of question Mr Reagan's Justice Department did not like even to see posed, let alone answered. For all Mr Rill's brave talk, Mr Bush's Justice Department has yet to prove it is different.

## Australian entrepreneurs

### Alan Agonistes

MELBOURNE

THAT embattled Australian tycoon, Mr Alan Bond, brash to a fault, is at the centre of controversy yet again. Mr Bond's heavily indebted brewing, media and everything-else empire could do with a rest from the publicity Mr Bond attracts. But Australian newspapers are blaring that Mr Bond threatened to "destroy" the West Australian state government, his partner in a proposed A\$1.2 billion (\$920m) petrochemical complex, unless it agreed to terms favourable to Bond Corporation. Such tales only add to the worries that keep Mr Bond's bankers and shareholders awake at night.

On August 29th West Australia's premier, Mr Peter Dowding, shocked the state parliament when he alleged that Mr Bond threatened to topple the government. Mr Dowding claimed Mr Bond told him he would use his political influence to get the upper house of the state parliament to block state funds and so trigger an early election. This was threatened, alleged Mr Dowding, unless state authorities changed an agreement which required Mr Bond's company to indemnify a state government insurance firm for losses on its holding in one of Mr Bond's companies. Mr Dowding alleged that Mr Bond also demanded that the government buy some Bond Corporation properties in Perth, the state capital, at inflated prices in return for reducing his stake in the petrochemical project.

The state government wants Mr Bond to reduce his firm's share of the project from 49.9% to 25% because the project's bankers said his firm's role as major shareholder and

# Should communists have a stockmarket?

The more zealous economic reformers in the communist world think that, alongside free prices and independent enterprises, they need that most capitalist of institutions, a stockmarket. Maybe not

RUSSIA'S finance minister recently promised a "genuine capital market". The establishment of a stockmarket is included in a three-year austerity plan the Polish government is drawing up with the International Monetary Fund. In China up to 10,000 companies have issued shares and there are now stockmarkets in Shanghai, Beijing, Shenyang and other provincial cities. "By 1995 nearly every state-owned corporation will have issued shares that will be publicly traded on exchanges around the country," predicted one leading Chinese exponent of economic reform, admittedly before the bloody suppression of the pro-democracy movement cast doubt on the whole programme.

Why do reformers attach such importance to stockmarkets? One reason is that they believe transfer of ownership to non-government shareholders helps preserve newfound managerial independence. Reformers think stockmarkets are better than bureaucrats at allocating money for investment. Most planned economies have overinvested, with heavy industry prospering at the expense of consumer goods production, and with little regard for relative efficiency and profitability. Result: shortages, queues and dissatisfied shoppers.

Reformers also reckon that stockmarkets encourage inefficient managements to be weeded out and replaced by market, not political, mechanisms. This further reduces the scope for state interference—not to mention bribery, corruption and nepotism.

Sadly, all this may be wishful thinking, according to Mr Ajit Singh of Cambridge University. In a recent paper\*, focusing on China but with a broader relevance, he says the introduction of a stockmarket will not achieve what the reformers hope. It could make things worse.

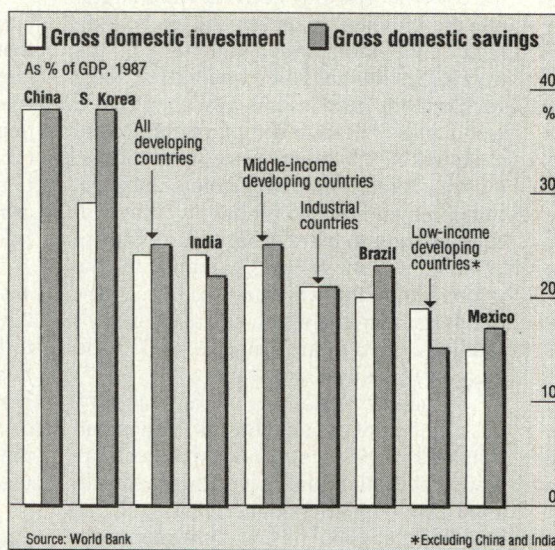
Mr Singh starts by noting that China's economy has performed impressively without a stockmarket's helping hand. In the 1980s its industrial production and GDP have grown faster than South Korea's. But this dizzy expansion has resulted in an inflation rate of some 25% a year, while poorly distributed investment continues to hog resources.

Reformers argue that a stockmarket would cut inflation by promoting savings.

## ECONOMICS FOCUS

Yet China already has one of the world's highest savings rates, officially reckoned to be equal to 38% of GDP in 1987. If savings need to be increased further, Mr Singh says, higher real interest rates on bank deposits or, better still, extending modern banking to rural China would be more effective than trying to persuade people to buy risky shares.

Chinese inflation stems from excessive aggregate demand, which in turn arises



partly from a loss of central control over the investment decisions of enterprises. The Chinese government has been reluctant to dampen demand for fear of stagflation. "Without such macroeconomic stabilisation, a likely stockmarket boom in inflationary conditions would make control over prices more, rather than less, difficult," Mr Singh argues. In any case, he says, China's government has tackled sectoral imbalances in investment with some success, switching funds to production of consumer goods and to agriculture as fast as a stockmarket could.

What about inefficiencies in individual enterprises? Mr Singh draws on experience in capitalist countries to dash reformers' hopes for the magic of stockmarkets. In the West, most big companies choose not to rely on the stockmarket for cash, but finance their investments from retained profits, bank borrowing or bond

issues. He argues that there is little evidence that share prices, volatile in the short term, bear any systematic relation to long-run company performance. In his view, that makes stockmarkets a poor mechanism for directing investment to those companies best able to use them.

Mr Singh follows the now widespread fashion of denigrating takeovers as a costly and inefficient mechanism for forcing change. As for weeding out incompetent management, studies suggest that small, profitable, well-run companies are more likely to be grabbed than big, relatively unprofitable ones—B.A.T and other mega-bids notwithstanding. Such studies have a drawback, though: they ignore the fact that fear of takeovers can (in the absence of any other pressure) be the only way to keep managers awake, even if the fear is unmeasurable.

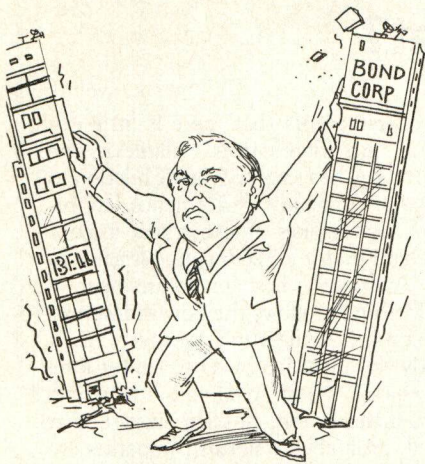
Nevertheless, experience of privatisation in Britain and other western countries does suggest that ownership is, on its own, not an overriding spur to efficiency. What matters is competition for the products they are selling—provided managers in state-owned companies are free to manage.

Mr Singh notes that profit-sharing can be and is used as an incentive for workers and managers in state-owned enterprises in many countries (including China) without either share ownership or a stockmarket. If incentives need to be strengthened by giving employees a stake in the business, shares can be issued even if there is no stockmarket to trade them on.

They will pay a dividend related to profits.

If not a stockmarket, what? Mr Singh's suggestion is ingenious. Why not simulate the positive features of a stockmarket—and avoid what he sees as the negative ones—by creating new financial institutions to act as competing holding companies of industrial enterprises? These holding companies (they sound rather like West German banks) would have managerial autonomy and their performance would be judged by profitability. But to achieve real efficiency gains, this new organisational structure would have to be accompanied by measures to increase competition. That is a nettlesome communist countries have yet to grasp.

\* In "The Chinese Economy and its Future: Achievements and Problems of Post-Mao Reforms". Edited by Peter Nolan and Dong Fureng. To be published by Polity Press, Cambridge, in October.



manager was an "extremely negative" factor in financing the complex. The firm is suing the government over breach of contract. Bond Corporation denies Mr Dowding's accusations. The parliamentary opposition also denies plotting with Mr Bond and has called for an inquiry. It suggests that criminal charges be laid if Mr Dowding's accusations turn out to be true.

Mr Bond is used to controversy. In June this year the Australian Broadcasting Tribunal found him unfit to run his radio and television networks, after hearing an allegation that he threatened to use his media interests against an institutional investor and because further controversy surrounds a large out-of-court defamation settlement with Queensland's then premier, Sir Joh Bjelke-Petersen, a long-time local power-broker.

Some big investors have deserted Bond Corporation, saying that it is carrying too much debt. Shares in the firm (60% owned by Mr Bond) have fallen from A\$1.87 to A\$0.50 this year. Mr Bond's deal-making style helped brilliantly to build his empire. His enemies are crowing that it may also help to pull it down.

### Tourism in Hongkong

## Peace and quiet

HONGKONG

**H**OTEL prices cut by a third; restaurants with empty tables; heavy discounts for foreign shoppers; scenic spots uncluttered by Japanese tour buses—after five years of hectic growth, Hongkong's tourist industry is experiencing an unwelcome spell of tranquillity. The reason is simple: because China's army on June 4th bloodily cleared Beijing's Tiananmen Square of its demonstrators, fewer foreigners want to visit barbaric China. That means fewer tourists stop over in civilised Hongkong.

Their absence is making many in the British colony nervous. Tourism last year

## Sweet and sour

HONGKONG

**T**HE tourists may no longer be flooding into Hongkong, but the place is more popular than ever with emigration consultants and overseas property agents. Hongkong probably enjoys the dubious distinction of being the world leader in trade fairs catering for those wanting to flee to a safer haven. The largest so far, a five-day shindig called the Emigration Expo '89, attended by an estimated 100,000 people and supported by 120 firms of emigration consultants and overseas property agents, closed on August 28th.

Demand for space for such exhi-

was worth HK\$33 billion (\$4.2 billion) to the colony; it has long been the third-largest earner of foreign exchange, and employs directly and indirectly a quarter of the workforce. But in June, when there were 15.4% more hotel rooms available than a year earlier, the number of visitors to fill them was 20.5% lower. Since June (the last month with full figures available) the gap between demand and supply has probably widened, putting an extra strain on property investors and their bankers. So much for the positive thinking which opened nine new hotels last year and which envisaged today's total of 24,000 rooms rising to 32,000 and more over the next two years.

In fact, expansion at that rate was dubious well before the slaughter in Tiananmen Square. Hongkong's economy has been operating at its limit for the past three years. In 1986 gross domestic product grew by 11.2%; in 1987 by 13.6%. The first consequence is a shortage of labour and rising inflation; the second is a slowing in growth as the economy is forced to adjust. That is why GDP grew by a less febrile 7.4% last year, and—before June 4th—was projected to grow by 6% this year. Now, the forecast is for a 5% increase in GDP, which is comfortable enough for the colony's planners.

But economic truths do not ease the pain of the tourist industry. Last year Hongkong's hotels enjoyed an occupancy rate of 92%. With capacity growing by 20% or so a year, the Hongkong office of Nomura Research Institute (a subsidiary of Japan's biggest stockbroker) was already predicting before June a fall in occupancy rates to 86% this year, 83% next year and 79% in 1991. Now, Nomura foresees a drop to 81% this year, 76% next year and 71% in 1991. Such levels are still healthy, since at "normal" room prices a Hongkong hotel needs to fill only 55% of its rooms to make a profit. But that assumes that hotels will not cut their prices to win guests—and cash—from their

competitors. Yet the Hongkong Convention and Exhibition Centre is not pleased. It is banning future emigration-linked exhibitions because they are thought to be damaging to the colony's already battered business confidence, not to mention its image in the rest of the world.

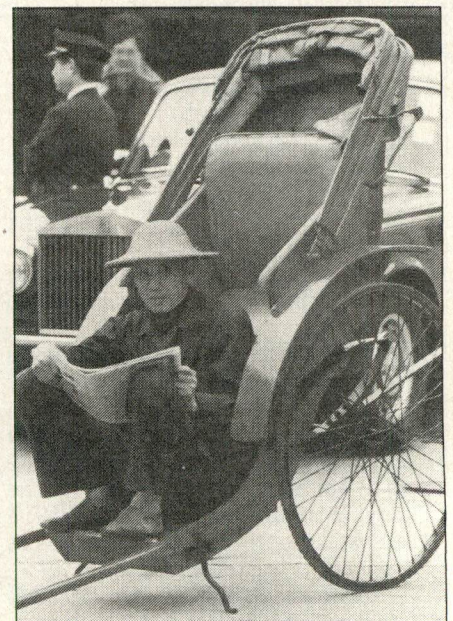
How much ice that will cut with Hongkong's Chinese residents is another matter. One local taxi driver, bemoaning his poor summer's takings because of the lack of tourists and the glum mood in the colony following the massacre of Tiananmen Square, suddenly broke off to ask if his English was good. "Yes," said your correspondent. Back came the question: "Good enough for Canada?"

competitors.

In practice, the price-cutting is already happening, especially in downmarket hotels that do not appeal to business travellers. Nomura believes the earning power of the colony's hotels could drop by 50-70%. The impact will be felt even at the top of the range. Some analysts believe the profits of Hongkong and Shanghai Hotels, which owns the old and luxurious Peninsula, will fall by 15-20% this year.

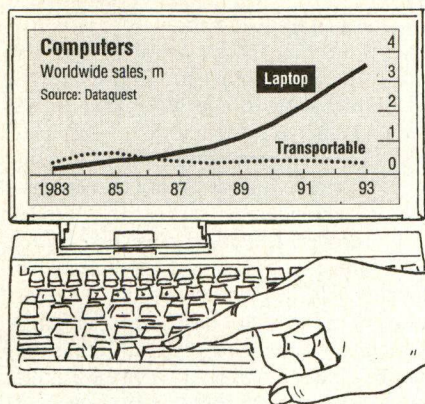
So what is the remedy? The immediate answer is to reduce the dependence on China (whose own tourist earnings are likely to be halved this year from last year's \$2.2 billion). Last year, of the 5.5m who visited Hongkong, some 28% were on their way to or from mainland China—including 38% of the visitors from Taiwan, 16% of the Japanese and 43% of the North Americans.

Such figures make Hongkong vulner-



Running on empty





narrow lead over Zenith in the world laptop league table (235,000 machines sold versus Zenith's 227,000).

Unfortunately for Toshiba, the company does not know when it will be able to introduce its pride and joy into America. It cannot export from Japan, because America is punishing Toshiba for selling "strategic" technology to the Russians. And it will take some time to tool up its American plant. The firm can guarantee an American launch only by the end of 1990. By that time competition for laptops will be even fiercer.

One competitor that Toshiba will certainly need to pay attention to, if only because of its name, is a Silicon Valley start-up also called Dynabook. This company—whose founders include a co-founder of success-story Sun Microsystems and a co-developer of IBM's PC—is launching its own light, stylish laptop. Like Toshiba, it borrowed the name Dynabook from Mr Alan Kay, a computer pioneer who coined the term to describe his dream computer. Unlike Toshiba, Dynabook has American rights to the name (but not Japanese rights).

## Taxing troubles

ONE of the world's biggest users of laptop computers is also an organisation whose productivity many would have second thoughts about boosting—America's Internal Revenue Service. Fortunately for the tax-delinquent, a recent report by the General Accounting Office, America's spending watchdog, reports that 18,000 laptop computers—\$36m-worth—have done little for the average tax-collector except to broaden his computer-carrying shoulder.

Laptops are not the only computer disappointment experienced by the IRS. Originally it hoped that, by spending \$1 billion on new computers of all types, it could help its tax inspectors to collect as much as \$43 billion more tax. Though the IRS has since cut its estimates of the additional tax to be gained to \$16 bil-

lion, the General Accounting Office has doubts even about that. Meanwhile, the IRS's estimates of the costs of its automation project have nearly doubled, to \$1.8 billion.

Laptops have turned out to be pretty useless. One big problem is software. The original version of the laptop auditing software came on 18 diskettes, among which the hapless taxmen had to shuffle. About two-thirds of the auditors did not use the software. Though the IRS has since cut the number of diskettes to seven, it has decided to rewrite the whole system in a different computer language. Meanwhile, none of the office-based software which the laptops were meant to link into has yet been made to work. Overall, the IRS's computer project is six years behind schedule. Well-wishers will hope some of the tax inspectors at least managed to play entertaining computer games with their fancy toys.

Another firm with heavyweight ambitions for lightweight computers is Compaq. Its chairman, Mr Ben Rosen, says that the firm will put much more effort into laptops in future. IBM, which botched its first attempt at laptops, is getting ready to try again, this time at the top of the market.

Compaq's good name will help it sell to many business buyers. But the most innovative technology is coming from a little-known Silicon Valley start-up called Agilis which wants to sell computers to workers who do not have offices in the first place: geologists, aircraft mechanics, surveyors and so on. Its machines are portable, waterproof and grease-proof. Some have screens on which an engineer can sketch with a finger. By the end of the year Agilis promises equipment that will link its machines to other computers via radio instead of telephone lines or local-area networks.

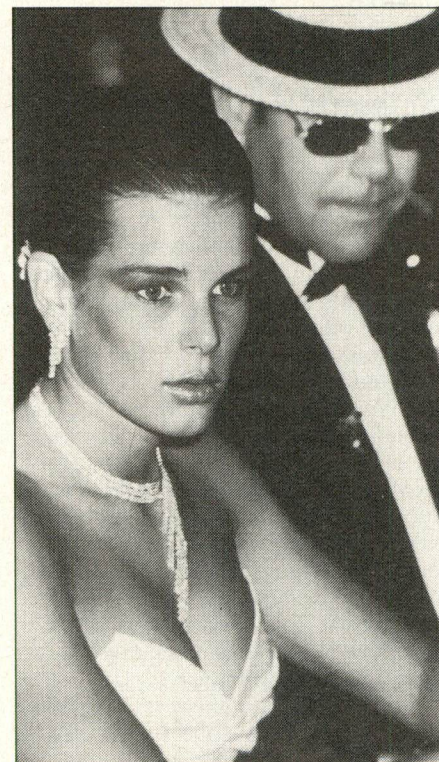
Against Silicon Valley inventiveness the Japanese are ranging the strengths that made them masters of consumer electronics: first, cramming more and more power-miserly equipment into a smaller, cheaper package; second, responding quickly to demand.

## European television

# Monte Carlo or bust?

IT WAS only a matter of time before somebody came up with it: the pan-European soap opera. "Monte Carlo" goes into pre-production in September. When shooting begins in the spring, the actors will speak in English; their voices will then be dubbed into French, German, Italian and Spanish. The plot looks like the usual soapy mixture of shoulderpads, serious money and less serious sex, with a bit of royalty thrown in (why do you think they chose Monte Carlo?). The unusual thing is that it is being made by an advertising agency.

EC Television (ECTV), a New York-based



Real-life soap

subsidiary of the Interpublic advertising group, will produce 260 episodes of "Monte Carlo" each year, enough to provide five instalments each week. The cost—roughly \$40m—is almost covered by four pre-sale agreements to television companies in the four biggest European markets—to Granada (Britain), Berlusconi (Italy), TDF1 (France) and Studio Hamburg (West Germany).

"The only way we can lose money is if we fail to sell the programme to any more markets," says Mr Larry Lamattina, ECTV's boss. Some of his rivals in European advertising regard this as typical soap banality. A few doubt whether "Monte Carlo" will be

made at all, let alone prove profitable. The project has been around for two years, they point out, and it will require lots of spending in advance. Only Granada is paying completely in cash. The other three are following the American system of telly-bartering and paying some of their dues with airtime. Mr Lamattina is already out scouting for advertising clients to sponsor the programme in exchange for a slug of that airtime.

Whatever the success of "Monte Carlo", bartering looks like the way of the future in Europe because it answers the European television industry's biggest problem: a chronic shortage of programmes to fill the airtime available (currently 285,000 hours a year in Europe and growing with each new station). There is a special shortage of European-produced dramas that can compete across borders with America's ubiquitous cops-and-robbers shows and glitzy soaps. In America bartering already accounts for around \$1 billion-worth of airtime a year.

Until now, game shows have been the most successful bartering arena in Europe, principally because they are so cheap to make. ECTV's first venture was a French version of the "Wheel of Fortune" quiz show, which it produced with Unilever: in return for putting up the cash, the Anglo-Dutch consumer-goods giant got favourable advertising rates. Interpublic recently bought a 47% stake in Fremantle, the world's biggest producer of game shows, which owns "Blind Date" and "The Price is Right".

The British market looks the hardest to crack because the independent television companies, which are banned from bartering by the Broadcasting Act, have a monopoly of television advertising. That monopoly is being whittled away by deregulation. Another hurdle, supposedly, is emotional: some people in British television have made snooty remarks about bartering and editorial independence. Their practice speaks differently. For example D'Arcy Masius Benton & Bowles, a British advertising agency, recently arranged transatlantic co-productions of "The Pied Piper", financed by Granada television and Procter & Gamble, an American consumer-goods multinational. Part of the money came from bartering in America.

The advertising agencies' involvement is not a novelty, but a revival. In the early days of American television many of the best-selling shows were produced by agencies for particular clients—until they were superseded by the networks and specialist independent producers. Recently Young & Rubicam announced that it was returning, lured by the high profit that production can bring at a time when agency profit margins are under threat. The growing European market was also a strong incentive.

Across the Atlantic, Britain's WCRS, which owns the biggest media-buying opera-

tion in Europe, is planning to move into producing television programmes. Mr Martin Sorrell's acquisitive WPP Group, which now controls both J. Walter Thompson and Ogilvy and Mather, is also known to be interested. But advertising and art are not synonymous, no matter what many of the chaps in creative advertising say to their secretaries. If bored, the public will switch off. Expect a flurry of bow ties and pink-rimmed spectacles into the television production business, and thereafter at least a few admen sobbing into their gin and tonics.

## European car imports

# We'll tackle it soon, honest

BRUSSELS



THE European Commission is at last getting ready to tackle Europe's heavily protected car markets. This is one of the hardest problems confronting the EEC's grand plan for creating a barrier-free internal market by the end of 1992.

Untangling the web of industrial and political interests will not be easy. The pre-tax price of the same car can differ by up to 30% from one member country to another; states still insist that vehicles imported from other EEC members meet their own national technical standards. Although trade policy is supposed to be set and run at Community level, five countries apply national import quotas on Japanese cars. On top of that, governments cosset their national carmak-

ers with state subsidies.

It is little wonder that many industrialists and government officials outside the EEC consider the commission's car policy a touchstone for the whole 1992 plan. Japanese carmakers are hedging their bets: Nissan, Toyota and Honda will supply some cars from new plants in Britain rather than exporting from Japan. They are right to be careful. The conundrum facing the Community is how to create a barrier-free market without letting the Japanese become the prime beneficiaries.

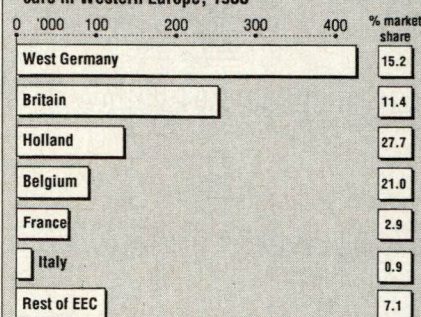
The commission is cautiously pushing ahead. Last January it issued new guidelines for vetting government subsidies to the car industry. All investments which are worth over 12m ecus (\$13.5m) and include an element of subsidy now need clearance from Brussels. This followed a series of recent cases where the commission queried projects involving state aid for manufacturers including Daimler-Benz, Peugeot, Renault, Fiat, the Rover group and Enasa, a Spanish truck maker. West Germany and Spain have refused to accept the new guidelines, so the commission has turned its lawyers on them.

The commission intends to submit new proposals before the end of 1989 for a Community-wide system of technical standards to replace existing national ones. Technical standards for a car in one country would then apply throughout the EEC. Most of the work was done in the 1970s and only three technical directives (on tyres, windscreens, and weights and dimensions) still require approval. These were vetoed by France at the time, but EEC voting rules have changed as part of the preparation for 1992, so a majority vote will now be enough to turn the remaining directives into law.

France, Italy and Spain remain the countries most likely to argue that such changes would open the door wide to Japanese imports. They accept that national import restrictions must go by the end of 1992, but they want them replaced by a Community quota system (preferably with a tiny quota). The commission is divided. Liberals such as the industry commissioner, Mr Martin Bangemann, want quotas to disappear altogether after a temporary period in which the Japanese "monitor" their exports to avoid any surge in shipments. Others, including the commission's president, Mr Jacques Delors, want fixed import levels throughout Europe after 1992. The commission is due to draw up its strategy in the autumn.

### Call this freedom?

New registrations of Japanese cars in Western Europe, 1988



Source: EIU



# PEARSON



## 1989 Interim Results

	1989 HALF YEAR	1988 HALF YEAR	1988 FULL YEAR
Profit before taxation	<b>£85.4m</b>	£81.7m	£198.9m
Earnings per ordinary share	<b>21.4p</b>	23.8p	55.7p
Dividends per ordinary share	<b>9.0p</b>	7.5p	18.0p



Sound progress against abnormally high 1988 half year profits.



Strong growth in underlying businesses with trading profits up 22% in continuing businesses excluding profits from recent acquisitions and from land sales.



Extraordinary profits of £104 million on disposals.



Interim dividend increased 20%.

The results for the year 1988 are an abridged version of the full accounts which received an unqualified report by the auditors and have been filed with the Registrar of Companies. The half year figures are unaudited.

A copy of the full announcement which is being sent to all shareholders is available from the Secretary, Pearson plc, Millbank Tower, London SW1P 4QZ. Telephone: 01-828 9020.  
29th April 1989.

Royal  
Doulton



FT

Lazard

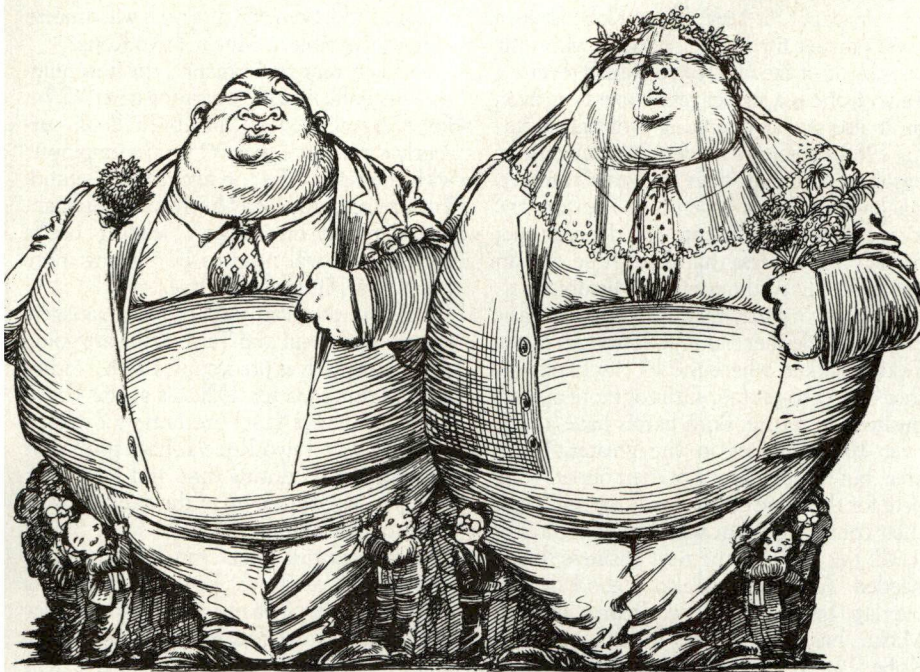


MAQAME  
TUSSAUDS



Addison-Wesley

Longman



## Wedding bells for Japan's big banks

TOKYO

**A** HANDFUL of Japan's 13 huge city (ie, national commercial) banks have long competed in a banking superleague of their own: Sumitomo, Mitsubishi, Sanwa, Fuji and the biggest of them all, Dai-ichi Kangyo. Now two smaller banks want to join. On August 29th Mitsui and Taiyo Kobe, ranked seventh and eighth by assets among Japan's city banks, announced plans to merge. If the deal goes through, Mitsui Taiyo Kobe Bank, as it will be known from next April, will become the second-largest bank in Japan (and thus in the world) in terms of assets. It will have some ¥39.7 trillion (\$277 billion), only just below Dai-ichi Kangyo's ¥41.2 trillion.

This will be Japan's first big banking merger since the Taiyo and Kobe banks merged in 1973. Given Japan's herd-like habits, it may presage more to come—but they will come at an awkward moment. Mitsui and Taiyo Kobe should be wary of supposing that largeness will solve the problems currently plaguing both banks, especially Mitsui.

The main problem is that hard times lie ahead for all Japan's lower-ranking city banks and some bigger ones, too. More and more corporate clients are tapping the capital markets rather than their bankers for fresh money. The competition for private

savings in Japan gets rougher by the day as insurance companies, securities firms and an increasingly determined Post Office all woo customers. They display attractive new savings products that carry, by banking standards, shockingly high interest rates. Banks' fund-raising costs have rocketed.

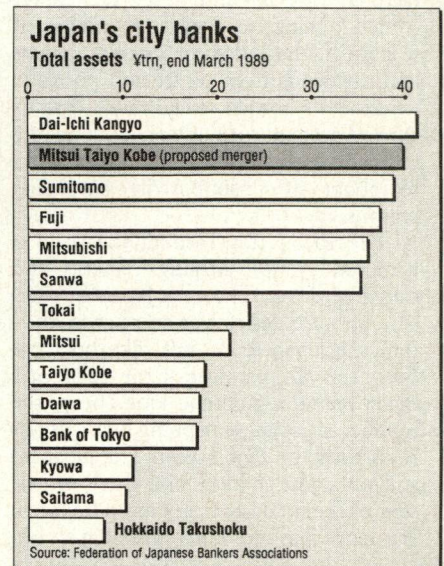
In the eyes of many bankers, deregulation has only just begun. Within the next 18 months or so, the Ministry of Finance is likely to bring some form of universal banking to Japan as a way of breaking down the already crumbling barriers that separate commercial from investment banking. For the smaller city banks, that will probably mean heavy investment in dealing rooms, computers and settlement systems in order to trade in corporate securities.

Under pressure from below by the larger of the regional banks (such as the Bank of Yokohama, Chiba Bank and Hokuriku Bank, which have an arm-lock on local business and savings) and from above by the big five super-banks, Japan's lower-ranking city banks feel they have nowhere to go but to each other. For further mergers, pundits are already sizing up Tokai Bank, Daiwa Bank and, above all, the sophisticated but third-world-debt-burdened Bank of Tokyo.

One previous staple of the city banks' earnings—their foreign-exchange business—has gone stale. Most houses have been caught out by the dollar's surge against the yen this year. And profits from bond dealing are not what they were, partly because the government is issuing fewer and fewer bonds. Mitsui has seen its dealings in government bonds collapse, from a profit of ¥21.7 billion in 1987 to a loss of ¥5.7 billion in 1988, with hardly any prospect of improvement this year. Mitsui has had little else going for it over the past few years, so it has relied heavily upon bonds.

With deregulation in Japan's wholesale and retail banking markets gathering pace, last year was a tough one for all 13 of Japan's city banks. Even so, Sumitomo, Mitsubishi, Saitama and the energetic little Hokkaido Takushoku all managed to increase operating profits. Sumitomo's operating income leapt by 55%. Mitsui was able to turn in respectable results last year only by selling off loads of shares it had been holding in its main corporate clients. Mitsui was not alone. Between them, Japan's city banks misleadingly reported a record ¥1.2 trillion post-tax profit last year, up 35% on the year before. But more than a third of that profit came from sales of "hidden assets".

Mitsui Bank, founded in 1876 but with its roots in the early seventeenth century, is Japan's oldest commercial bank. It was the nucleus of the vast Mitsui shipbuilding and trading empire that was ripped apart at the insistence of the Americans after the second world war and informally put back together thereafter. Mitsui Bank's biggest problem is that (like the group to which it belongs) it has been living off its past glory. Mitsui's tra-



ditional contacts in the world of corporate finance and foreign exchange have left it overweight and short of breath in an age when commercial banks are having to be fleet of foot and on friendly terms with smallish local firms and private customers.

Mitsui Bank has seen its woes grow progressively worse over the past eighteen months. In the latest financial year Mitsui's revenues were up by 20%, but its operating profit plunged by 38%. That is one reason why, by March, the bank's president, Mr Kenichi Suematsu, was in secret talks with the board of Taiyo Kobe. He hopes he has found a partner that can supply the retail clout and the small-company contacts that Mitsui lacked. The delicate negotiations were meant to stay secret. But they surfaced on August 28th in Japan's main financial daily, *Nihon Keizai Shimbun*, thus forcing the two to announce their wedding plans.

Mitsui officials are putting a brave face on the deal with Taiyo Kobe, calling it a merger of equals. For the sake of politeness, the two banks point to each other's strengths and their equal presence in the crucial greater Tokyo area, which accounts for roughly half of Japan's banking market. Behind all the face-saving, though, the deal is more like a takeover by the smaller bank from western Japan. The chairman of the combined bank will be Taiyo Kobe's president, Mr Yasuo Matsushita. The new headquarters will be in Taiyo Kobe's main Tokyo branch. And the new bank's name in Japa-

nese (which is what counts) gives precedence to Taiyo Kobe. After a decent interval, the Mitsui name might even be dropped.

On paper, at least, Taiyo Kobe looks a good partner for Mitsui. Though with only two-thirds of the old Tokyo bank's revenue, Taiyo Kobe is a slicker retail operator. Even so, it also saw its operating profit drop during 1988, by a more modest 7%. Taiyo Kobe has more branches than any other commercial bank in Japan, which is one reason why it is far from efficient. Its deposits per branch average less than half those of market leaders like Sumitomo or Mitsubishi.

The two partners will face some basic problems. Neither has much strength in the Tokyo market, where the 13 city banks say they expect to get four-fifths or more of their business in future. Both banks have a little over 100 branches in the greater Tokyo area, but three-quarters of their outlets compete for the same customers. That will make their combined branches more efficient, but it will not bring in the new business that is needed. And there is also a good deal of overlap between the two banks abroad. Mitsui has 17 overseas branches, Taiyo Kobe 11; in nine overseas centres both banks have a branch.

Even before the merger, the two banks looked bloated. After the merger, Mitsui Taiyo Kobe will have no fewer than 23,000 employees. Dai-ichi Kangyo, considered the least efficient of the big five city banks partly

because of its own creation by merger in 1971, has only 19,000 on its payroll; Sumitomo has just 16,600, despite having digested Heiwa Sogo Bank, a small bust mutual, in 1986. Some 68 directors will squeeze around the table at Mitsui Taiyo Kobe.

On current performance, the new number-two bank would be earning a net ¥5.7m for every employee. Mitsubishi Bank currently earns more than ¥11m per employee, with the rest of the top five not far behind. To survive in the hurly-burly world of financial deregulation, Japan's leading banks reckon they will need to be earning more like ¥12m-14m per employee.

Before they can shed the fat, managers from both Mitsui and Taiyo Kobe are going to find themselves preoccupied with a rather embarrassing matter. Officials at the Tokyo Stock Exchange (TSE) are none too happy with the way Taiyo Kobe's share price shot up suspiciously during June and July. Over that period, some 3.4m of the bank's shares were bought by a brokerage firm, Shinei Ishino Securities, which just happens to be an affiliate of Taiyo Kobe. Investigators learnt that, despite a new insider-trading law in April, Taiyo Kobe branches across the country were told by head office to give their best customers the tip. Their findings could affect just how accommodating the finance ministry chooses to be when it decides in November whether, or how, the merger should go ahead.

## See the world, cut the surplus

**R**EMEMBER how all the income from Japan's vast investments abroad was going to make its beastly balance-of-payments surplus last for ever? When the yen began to rise in 1985, scaremongers said that, even if Japan imported more manufactured goods and exported fewer (which, being a rigged economy, it wouldn't), the inflow of interest, profits and dividends from direct and portfolio investments abroad would mean that its current-account surplus would not fall until the twenty-first century. Wrong, thanks to about 10m supposedly surprising reasons.

The reasons travel around the world in bemused groups, lugging cameras and duty-free drink. They are Japanese tourists, who are destroying another myth—that the Japanese do not take holidays. Since the yen rose against the dollar and made everything abroad look cheap, the number of Japanese tripping overseas has been rising by 20% a year. The Japanese still work just as hard, and there is little sign of them taking many more holidays. But more and more are switching to for-

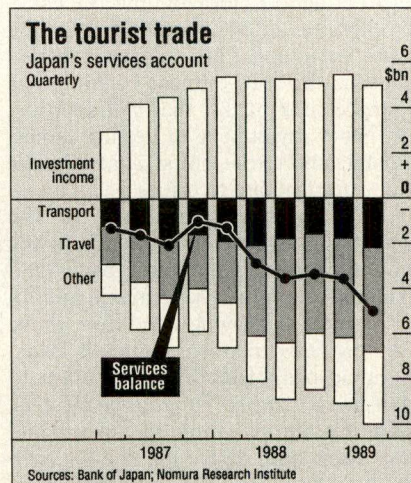
eign destinations the trips they always took at home. By the by, they are transforming Japan's current account.

In the 1960s and 1970s Japan ran a deficit on trade in services—which includes transport, tourism and patent royalties, as well as interest, profits and dividends. It did this while it was building a surplus on

its manufactured trade. The services deficit peaked at \$15 billion in 1981 and then fell rapidly as investment income began to flow. By 1986 the services deficit had fallen to \$6 billion. Pessimists said it would turn into a sizeable surplus.

Enter (or, rather, exit) the tourists. In 1986 Japanese travellers spent \$5.6 billion more abroad than foreigners did in Japan. That tourism deficit had risen to \$15.7 billion by last year; in the first half of 1989 it has already reached \$9 billion. Together with an increasing use of foreign ships by Japanese traders and a rise in official transfers abroad, that has more than outweighed Japan's net investment income (see chart). Even though that totalled \$21 billion in 1988, Japan's deficit on services rose to \$11 billion last year; this year it is forecast to total \$16 billion, perhaps more.

That is why, although Japan's trade surplus has remained stubbornly high, its current-account surplus (which is what matters for international payments imbalances) has fallen from its full-year peak of \$87 billion in 1987 to a forecast \$70 billion this year, a drop of 20%. *Domo arigato*, and if it's Tuesday that must be the Empire State Building.



# Government bonds dry up

Around the world, real yields on government bonds are falling

THE conundrum puzzling bond traders on the beaches this summer is why investors in the world's government-bond markets are accepting uncommonly low real rates of return on their holdings of long-term government bonds. In a year when inflation has been rising around the world, at first sight this seems odd.

Since the start of 1989 America's Treasury-bond market has sparked. Long-term yields fell from over 9% in January to 7.8% in July, and are now hovering at around 8%. All thanks to a sharply falling inflation rate? Not a bit of it. Annual inflation rose from 4.2% at the end of 1988 to 5% in July. Bond investors are earning a real yield on long-dated Treasuries of just 2.8%, down from 4.8% in January and more than 9% in 1985.

International investors have been bullish about the dollar for much of this year. So it might be argued that foreigners have been happy to accept lower-yielding dollar assets because they expect to profit from the currency's appreciation. But real returns have also fallen on government bonds other than America's.

In Britain long-dated gilt yields have, in nominal terms, stayed roughly constant this year, while the annual inflation rate leapt from 7.5% in January to a peak of 8.3% in May. Real yields on long gilts are now less than 1%. In Japan inflation of 3% has eaten into yields of just 4.8% on long government bonds, to give a real return of 1.8%, against 6% in 1985.

Many investors point out that each country has its own peculiarities that have led to a distortion of the inflation rate (and hence real yields): this year's new sales tax in Japan, for instance, or the fact that mortgage payments in Britain are included in the retail-price index. But, as the chart shows, the trend for real rates since 1985-86 has been unmistakably downwards. There are several possible explanations.

One is that investors are demanding less danger-money against the risk of a fresh burst of 1970s-style inflation. Real yields are measured using expected inflation, not current rates. Investors seem to be trusting central banks' anti-inflationary resolve. After their aggressive easing following the October 1987 stockmarket crash, most central banks have tightened monetary policy in order to rein back a

## MARKET FOCUS

boisterous world economy, and are only now thinking of easing again. Short-term rates in the big economies are higher than they were 18 months ago—and higher than current long-term yields.

Some see Japanese portfolio investment as a big force bidding down real yields around the world. As capital floods out of Japan (and, to a lesser extent, West Germany) as a counterpart to its current-account surplus, Japan could also be exporting its own, lowish real rate of return from government bonds. Last year Japanese investors bought around a net \$50 billion of American Treasuries; this year

amount of publicly issued debt in the world's 13 biggest bond markets grew by only 3.4%, to \$5.6 trillion. That was after leaping by 27% in both 1986 and 1987.

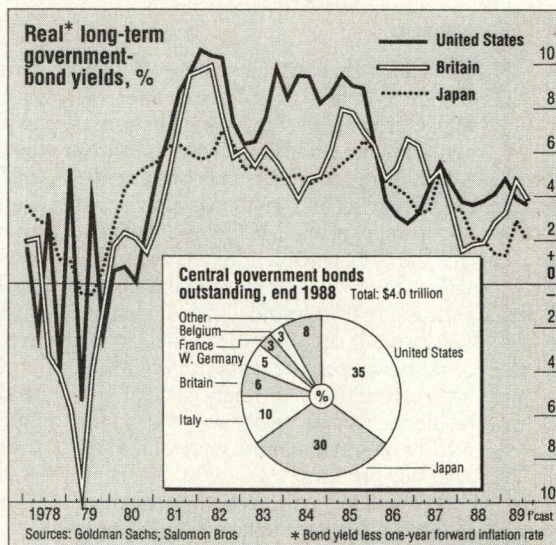
Britain is already ahead of the field. This financial year the Bank of England will buy back up to £18 billion (\$27 billion) worth of gilts—not counting the £11.6 billion of bonds that are anyway due for redemption. At that pace, Britain's £110 billion of national debt would be wiped out well before the turn of the century. As the pool of gilts evaporates, investors are readier to pay a premium to hold the high-quality paper. And ultra-low real yields appear more attractive when there is a buyer of first resort—the government—to buoy up prices.

Only five years ago Japan was running a fiscal deficit worth 5% of GDP; now the ruling Liberal Democrats are forecasting that the budget will be in surplus by 1991. Even America's budget deficit is getting more manageable. It has fallen from a record \$220 billion in 1985-86 to \$155 billion in 1988-89. As a proportion of GDP, the deficit has fallen from a peak of 6.3% to around 3% today.

Mr Edward Yardeni, chief economist at Prudential-Bache Securities in New York, uses demographics to back the bond-shrinkers' arguments. He reckons that demographic changes already underway will hugely boost America's savings, reduce the need for foreign capital to finance America's twin deficits and help to lower interest rates on the nation's ever-shrinking debt.

Mr Yardeni's thesis is that, as today's yuppies are transformed into tomorrow's wrinklies, the bulge of 75m Americans born between 1946 and 1964 will start to save more. Already, the personal savings rate has revived from an annual 3.2% in 1987 to 5.4% today. Mr Yardeni predicts that personal savings will double over the next three years. That saving, he says, will feed a low-inflation investment boom in America and abroad: Treasury-bond yields will fall to nearly 6%, stockmarkets will soar.

Bond investors know that a lot can happen to upset these rosy forecasts. For a start, America is piling up a stack of off-budget liabilities (such as a \$100 billion-plus plan to rescue the country's bust thrifts) which will need to be financed. Moreover, a recession would scupper governments' debt-reducing plans. Already, both Britain's and Japan's socialist oppositions have vowed to spend more should they come to power. Then, investors would be sniffer about the returns they are prepared to earn.



investment is continuing more slowly.

If Japan gets the taste for more investment in overseas government bonds, it will have plenty of money with which to do so. Since 1986 Japanese insurance companies have been allowed to hold 25% of their portfolios in overseas assets, compared to 10% previously. They will shortly be allowed to invest up to 30%. And, as Japan's savings system deregulates, more money will be freed up. Next year the Post Office will, in a search for higher yields, be allowed to invest overseas much more of the \$300 billion of savings policies it holds in trust.

One idea that is gaining currency among economists is that, over the next three to five years, more investors will be chasing fewer government bonds. In 1988, says Salomon Brothers, the nominal

## Chile

## A long-term investment

SANTIAGO

BECAUSE of its rather un-Latin American image, Chile's tiny stockmarket is attracting some foreign interest. Chile has never missed an interest payment on its (shrinking) foreign debt and its economy has grown at a steady 5% for the past five years. This reliability is prompting Salomon Brothers, a New York investment bank, to offer shares in a Chile Fund on the New York Stock Exchange. Salomon has permission from the Chilean authorities to invest up to \$200m in the country's equities.

Other banks have less ambitious ventures already running. Britain's Midland Bank and its Chilean stockbroking partner, Inverchile, have a Bahamas-based fund for \$5m and plan another. Citicorp is working on a couple of \$4m-5m offshore private placements. Security Pacific, a Californian bank, manages several similar-sized funds for private investors from Britain, Singapore and California. All three fund managers have seats on the Santiago stock exchange, and are used to its ways.

Their funds are all direct investments, registered under Chile's foreign-investment law, which allows profit remittances after three months and capital repatriation after three years. There is another variant on offer: shares in investment funds which can be bought through the central bank's debt swap programme for foreign investors, known as Chapter 19. The catch is the restriction on sending profit and capital back home. Dividends have to be reinvested for six years and capital cannot be repatriated until the fund is compulsorily wound up after 12 years.

This conversion programme (and a similar scheme which allows Chileans to use money from foreign bank accounts to buy Chilean debt at a discount and swap it for pesos) has already whittled Chile's commercial bank debt from \$15.3 billion in 1985 to \$6.3 billion by mid-1989. Three big American banks (Manufacturers Hanover, Citicorp and Chase Manhattan), Midland and an assorted bunch of Japanese banks now hold half the swappable paper.

The banks are now rushing to set up more stockmarket (or Chapter 19) funds before the presidential and congressional elections—the first for 20 years—due in December. Midland has already set up one stockmarket investment fund, for \$30m, with four other partners, all banks. It is now working on its second, for \$60m, with another three banks. Citicorp is looking for the minimum of three partners it needs for a \$30m fund. Chase Manhattan has an-

nounced a \$100m venture and Bankers Trust talks of running a fifth, for \$50m.

The attraction for creditors is that the funds can produce income immediately. Other Chapter 19 investments in new projects, such as mines or companies, take longer to evaluate and check. The banks are scampering to get their schemes approved because they reckon that the military regime's colourless candidate, Mr Hernan Buchi (its former finance minister), will lose in December. An opposition government, headed by a Christian Democrat, Mr Patricio Aylwin, would almost certainly mean a halt in the stockmarket scheme when a new government takes over next March.

This splurge of foreign investment suits the present government, which wants to develop the local capital market. Replacing the state pension system with private pension funds, obligatory for everyone except the

military, has provided institutional investors with clout. They now control funds worth \$4 billion, just under 20% of GDP.

Yet the market remains tiny, with a capitalisation of \$6.6 billion. Nearly a quarter of that has been added in the past three years following the privatisation of 20-odd state companies. But most of what can be sold off by the state has been.

The price-earnings ratio, hovering around five, means that raising equity capital is expensive for private companies. They will not issue shares until their share prices are closer to ten times earnings.

That is some way off. Prices have actually been falling in the past couple of months, as both speculators and institutional investors switched into Treasury bonds and other government securities: these are reckoned to be safer in a period of political uncertainty. They also offer high interest rates. Longer term, with more

## Three men in a suit

NEW YORK

IS HUBRIS about to catch up with Henry Kravis? Two weeks after his wife, Carolyne Roehm, a dress designer, was featured on the cover of *Fortune* magazine in a peculiar story about chief executives' second wives, Mr Kravis and his other partner, Mr George Roberts, face the embarrassment of a lawsuit filed against them by their mentor and former partner, 63-year-old Mr Jerome Kohlberg. If left unsettled, the lawsuit could blow open the strict privacy which has surrounded the financial affairs of Kohlberg Kravis Roberts (KKR), the world's largest and most successful leveraged buy-out firm.

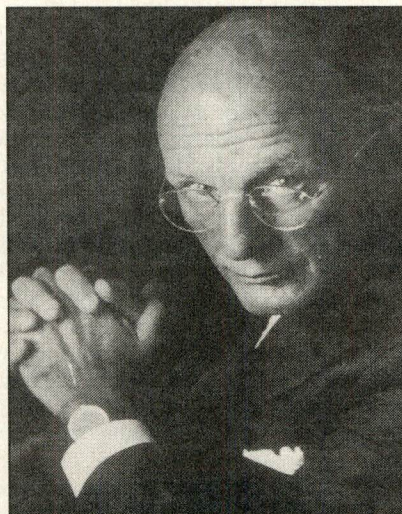
KKR was set up in 1976 when the three founding partners left an investment

bank, Bear Stearns. Mr Kohlberg subsequently resigned in 1987 citing "philosophical differences" with his partners, both 19 years his junior. The lawsuit makes clear that Mr Kohlberg retained a partnership interest in KKR and the right to own stakes in all the companies which the partnership acquired before 1987, as well as the right to take equity stakes in future KKR deals until 1995. So far, KKR has done 35 deals.

Mr Kohlberg claims that Mr Kravis and Mr Roberts used refinancings to reduce his equity stakes in four companies, where he held between 26% and 37%, to a standard 17.6%. He argues this was in breach of his departure agreement.

The KKR view is that Mr Kohlberg has his facts and interpretation of that agreement plain wrong and that the irony of his suit is that, if successful, it would further increase the wealth of the already super-rich Mr Kravis and Mr Roberts, who would also have their equity stakes increased. The KKR line is that the equity stakes were reduced to give more equity (and so incentive) to KKR's staff of 19 financial professionals.

Whatever the legal merits of the lawsuit, it is noteworthy that Mr Kohlberg is the most publicity-shy of the three. Odd, then, that he could not resolve the dispute with the former partners in private. In a terse statement released on August 29th, Mr Kohlberg said he took the step with "extreme reluctance", adding that he kept his word and strived to maintain the highest fiduciary standards and expected "the same of others".



Jerome K: retiring but no longer shy

funds and from local pension funds, which have recently been allowed to invest in a wider range of shares, prices should be chased up. That in turn should prompt companies to put more shares on the market.

## Junk bonds

# Last resorts

NEW YORK

**S**OMETHING is out of whack in America's financial markets. But what? Driven by takeovers and buy-outs, the Dow Jones industrial average is setting new records as investors rediscover the confidence they lost in the October 1987 stockmarket crash. Spirits are alive again. On August 29th the share price of American Airlines' parent company, AMR, soared by almost 13%—merely on rumours that the airline had retained banks to prepare an anti-takeover defence.

Such early signs of stockmarket euphoria are a sharp contrast to the gloom of the \$200 billion junk-bond market. One measure is the spread of junk-bond yields, as tracked by the Donaldson, Lufkin & Jenrette active-issues index, over equivalent Treasury bonds. Wider generally means gloomier. That spread is currently at an all-time high of 540 basis points.

The contrasting mood in the two markets is odd. Junk bonds are a brand of quasi-equity in the sense that, unlike conventional bonds, they are less a bet on interest rates than on a given company's earning power, and in particular on its ability to meet interest payments out of its cash flow. Sadly for junk investors, increasing numbers of American companies are having problems making such payments.

The latest casualty came on August 28th when Resorts International, based in Atlantic City, announced it was stopping paying interest on \$925m of secured and unsecured notes, including \$325m-worth of junk bonds sold by Drexel Burnham Lambert, the leading junk investment bank, last November. This was the latest in a series of Drexel-underwritten issues to turn sour.

In Resorts's case, the problem is a simple one: Mr Merv Griffin, a former chat-show host, paid too much when he bought the casino from Mr Donald Trump, a property man, last November. Even so, the setback has not helped Drexel's image. The bank recently pleaded guilty to financial skulduggery; its former junk-bond supremo, Mr Michael Milken, is awaiting trial for numerous securities offences. Though Drexel still has a share of nearly 50% of the junk new-issue market, it can no longer raise capi-

tal for borrowers, however broke, simply by getting Mr Milken to make a few well chosen phone calls.

Stretched Drexel borrowers are finding that they can no longer refinance their debt as easily as they once could. Early in August a Drexel attempt to restructure one of its clients, Integrated Resources, collapsed. Integrated made its name as the prime seller of syndicated property partnerships, a form of investment that America's 1986 tax-reform rendered all but redundant. It failed to move successfully into new areas of business. In April Integrated was featured at Drexel's annual junk-bond conference in Beverly Hills



My cash flow's hurting, darling

as a successful example of junk-bond financing. In June Integrated stunned the markets by announcing that it would default on \$1.5 billion of bonds and commercial paper outstanding. Drexel had underwritten \$798m

of the bonds.

Before this shock, Integrated's bonds were not even rated as junk. They merited a BBB-minus, the lowest investment grade, from Standard & Poor's, a rating agency. The paper now sells for as little as 14 cents on the dollar. Another blow to the Milkenless Drexel was the collapse of Southmark, a Dallas-based supermarket chain which in July filed for bankruptcy protection. A long-term client of the investment bank, Southmark had issued \$757m of junk bonds underwritten by Drexel.

The junk market foresees more problems to come—hence those wide spreads. Issues on most investors' watch-lists are those in industries that are slowing down, such as retailing, house-building and savings and loan associations (thrifts). And there is a greater reluctance to commit new capital. On August 11th First Boston, another investment bank, had to cancel a \$475m junk-bond sale by Ohio Mattress, America's largest maker of conventional bedding and therefore viewed by investors as suspiciously dependent on the fortunes of the housing industry. The bonds, due to yield 15%, were meant to pay off short-term loans used to finance a leveraged buy-out of the company made earlier this year.

This refusal by investors to step up to the plate is a relatively rare event in the junk-bond market. Usually, investment bankers can devise gimmicks—such as zero-coupon pay-in-kind extras—to lure them in. It is puzzling that creditors should become so shy. One reason for the stockmarket rally this year is the sense that companies' equity values should more fully reflect their takeover value. Remove the junk-bond market, and you have lost a useful source of takeover financing. So which market is wrong?

## The CFTC in Britain

# Future tense

**T**HOUGH it has its hands full cleaning up the fraudulent mess in Chicago's futures pits, the Commodity Futures Trading Commission (CFTC), America's futures-and-options industry regulator, still seems determined to police part of the City of London's securities business as well. British firms, backed by their self-regulatory organisation, the Association of Futures Brokers and Dealers (AFBD), are fighting to keep the CFTC off their patch.

Both sides have fallen out over the regulation of futures contracts sold to American clients by City firms, especially those on the

London Metal Exchange (LME), the world's largest forward market for base metals. American clients account for 16% of the exchange's total business. According to the CFTC's Part 30 rules, these deals must be regulated by the commission unless the foreign brokers involved are governed by "equivalent" rules. LME traders reckon they are, but the commission is not so sure.

At issue is the CFTC's insistence on segregation of customers' accounts. Segregation—where a broker keeps a client's cash in a separate account—is required by law in American futures markets. In Britain, Lon-

don FOX (the soft-commodities market) and the London International Financial Futures Exchange follow the American practice. Almost all investors on the LME have unsegregated accounts.

The reason for this, says the LME, is its unique clearing system. Investors on most futures exchanges put up cash (or similar) margins through brokers with a clearing house as collateral for their futures positions. These margins are then altered daily to reflect market movements. The LME, though, is not cash-cleared. (Indeed, until 1986, it had no clearing house at all.) Instead, accounts are settled only when contracts expire. Whenever the market moves against investors, the exchange's 38 clearing members can call on bank guarantees rather than get customers to put up extra cash.

This means that investors, who often need put up no margins at all, are happy to place cash in unsegregated accounts. The CFTC, though, reckons these are too risky. On May 15th it issued an exemption order which gave British firms acting on behalf of American clients 120 days to comply with CFTC rules—including the one on segregation. This provoked a storm of protest, espe-



cially from conspiracy theorists on the LME who claim that the commission is in the pocket of American firms losing business to savvy British ones.

Rather than risk a showdown, the commission on August 29th extended the deadline—by another 60 days—for LME members to comply. (Traders in other markets still have to meet the original September 15th deadline.) This delay gives the CFTC

more time to consider an AFBF proposal put forward in June. It suggests that accounts of American trade clients should be exempt from segregation providing they are given a "health warning" outlining the consequences of non-segregation. Private clients' accounts—a tiny number—are already segregated under British law.

If a compromise cannot be reached, LME members fear the worst. "We are in danger of becoming the 51st state of the Union," says Mr Keith Gaunt, the managing director of Amalgamated Metal Trading and one of the CFTC's most vocal critics. Mr Gaunt has a point. This spat in a little-known corner of London's financial markets may set a serious precedent. If the commission is allowed to dictate to British brokers on the segregation issue, then where does a foreign regulator's bailiwick end?

France has already told the CFTC to clear off. The British government should follow suit; so far, only the AFBF has put up a fight. Back in Washington, some of the LME's big American customers are saying the same thing. The commission should take the hint. After all, London's financial markets already have more regulators than they need.

## Commodity swaps

# A risky business

**Financial swaps have grown into a \$1.5 trillion market. Are commodity swaps set to follow?**

**B**ANKERS are in danger of becoming risk-addicts. After building up interest-rate and currency swaps from virtually nothing at the turn of the decade, banks are turning their attention to other, ostensibly non-financial, risks. Their newest and most passionate interest is in commodity swaps.

Banks claim that their involvement in the commodities business is a natural extension of their earlier forays into financial engineering. As engineers, banks see their role as helping their customers to eliminate risks that could upset their businesses. The easiest risks for the banks to deal with were the financial ones, such as fluctuations in interest rates and currencies. Now they are trying to treat other risks, such as changes in commodity prices, with the same techniques.

The simplest commodity swaps allow end-users to fix the price of their supply, and suppliers to fix their incomes. Although end-users have a need for the commodity, they are often just as happy to treat the transaction as a paper (or financial) deal.

Take the holiday business. The biggest risk that a package-holiday operator or char-

ter airline faces is that its costs rise unexpectedly. And its biggest variable cost is jet fuel. Over the past year the price of jet fuel has fluctuated between \$120 and \$200 a tonne. Since these companies are running on tiny profit margins, any sharp adverse movement in the price of fuel could wipe out their profits for the year.

Hedging this risk is more easily defined than done, since there is no futures market in the fuel. Some companies take the risk of hedging their jet-fuel exposures with crude oil: quite a risk, since the two prices do not move in tandem. And another drawback to using oil futures is that the most easily traded part of the market is the "near months"—the futures contracts closest to maturity. At the moment, all of these contracts mature before Christmas. That is of little use to tour companies which want to hedge next summer's risks before they start selling holidays this autumn.

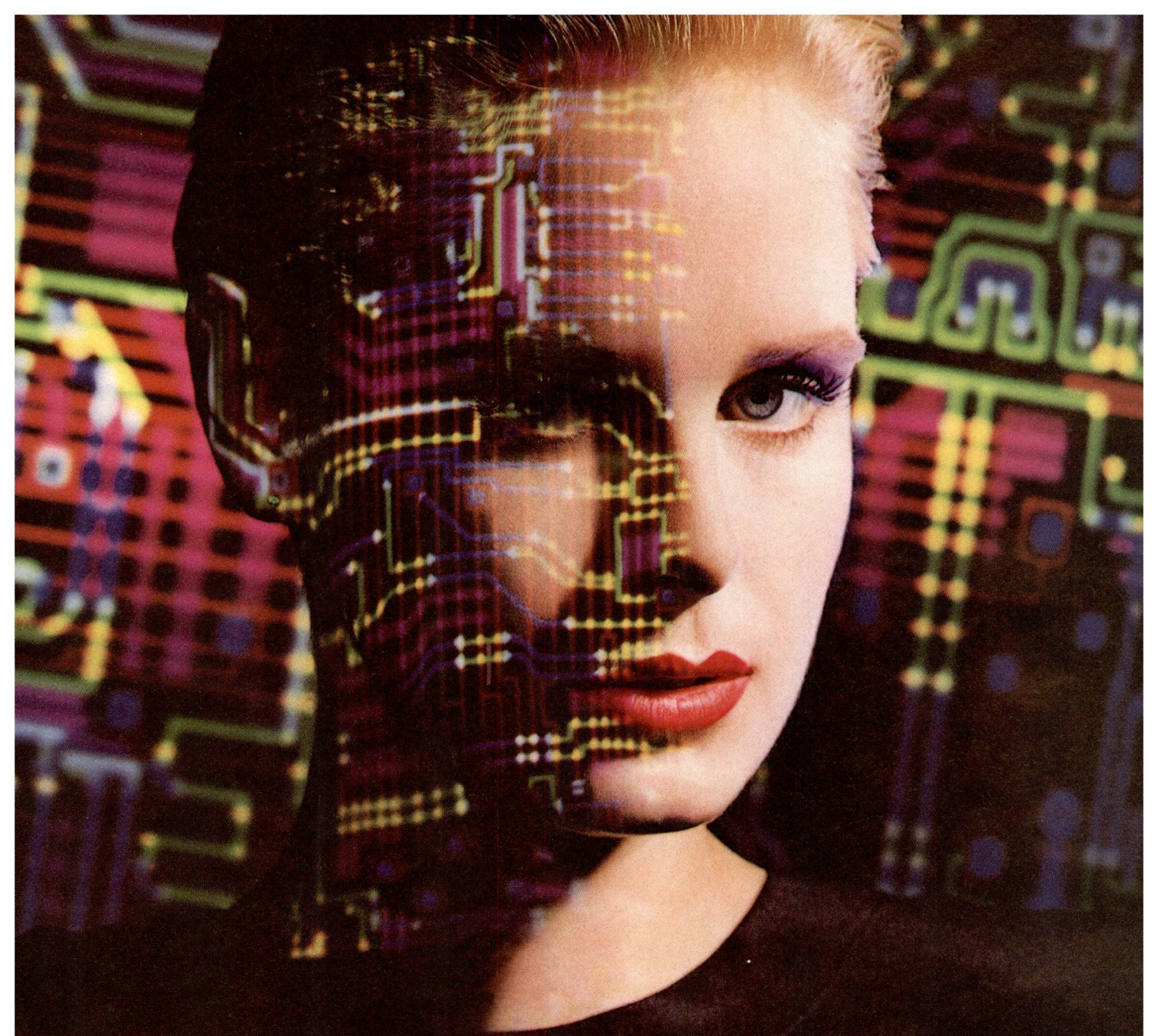
So far, most banks have not yet started to run positions in commodities in the same way as they take positions in foreign exchange or on interest rates. Investment

banks, such as Britain's Midland Montagu, tend to act as agents for the tour companies in finding firms willing to sell the companies the insurance they seek. These insurers tend to be specialist oil traders such as Phibro Energy, part of Salomon Brothers, a New York investment bank, or British Petroleum's trading operation. Since they trade the whole gamut of oil products, such firms can hedge their positions more efficiently and effectively than can the tour operators.

The banks' cautious attitude is likely to change. Broking is only mildly lucrative; on average, banks earn a commission of between 0.5% and 1% on the business they place. Running positions and hedging them can earn the banks twice as much.

More banks will start to use their own money to back their deals following a decision by America's Commodity Futures Trading Commission on July 17th not to regulate American commercial banks' swaps and options businesses. Already, the bank established longest in commodity swaps, Chase Manhattan, acts as a principal. Although some American states still have rules that curb American banks' ability to trade commodities, most banks with pretensions in swaps and options—such as Continental—want to get into the commodity-swaps market.

The bulk of the commodity-swaps business is in crude oil and its derivatives such as jet fuel and bunker fuel-oil (burnt by ships).



# SHARP TECHNOLOGY. THE REASON SHARP COPIERS ARE #1 IN USER SATISFACTION.

Sharp puts the most advanced technology into every Sharp copier. So, from desktop, to high-speed heavyweight to clear, high-impact color—every Sharp copier delivers the reliability and productivity your business needs. In fact, in a recent survey of copier



customers, Sharp copiers ranked #1 in user satisfaction, operating ease, copy quality and consistency. That's why smart businesses buy Sharp copiers again and again. To learn more, call 1-800-BE-SHARP.

**SHARP**  
FROM SHARP MINDS  
COME SHARP PRODUCTS™

## FINANCE

Traders reckon that around 8m tonnes of oil and its derivatives (worth around \$1.7 billion) have been swapped so far this year. Apart from the black stuff, the main commodities that have been swapped are copper, aluminium, nickel, zinc, cement and pulp.

Many commodity traders would welcome banks into their market. There is often a big discrepancy between the creditworthiness of people who want insurance and those who are selling it. BP, which provides insurance, is one of the world's best credits; the buyers of its insurance—such as Pan Am and several shipping companies—are often not. It would be simpler for the BPs of this world to deal directly with the banks.

Although most commodity swaps have been between companies in industrialised countries, they could be a way for third-world companies and countries to obtain cash. Banque Paribas, a French bank, recently made the biggest-ever copper commodity swap (worth \$210m) which guaranteed a producer, Mexicana de Cobre, a fixed price for its copper production for 38 months.

The company obtained the money upfront in the form of a loan from a syndicate of five other banks besides Paribas.



Chase Manhattan at your service, sir

Mexicana de Cobre paid 3% over LIBOR, the banks' wholesale lending rate. It used the money to refinance more expensive debt; other third-world commodity producers could easily use the technique to finance the development of a new mine, say. The banks are to be repaid their interest and principal

from the proceeds of the sale of copper.

The risks that the copper price might fall from its present price of \$1.35 per pound, or that Mexicana de Cobre might not be able to sell its copper, were eliminated by a pair of deals. One fixed the price and the other the user. The long-term user was happy to pay the floating price of copper (ie, a price relating to the prices quoted on the London Metal Exchange). This flow of cash went to the copper user, who wanted to fix a price, and paid for it (and so in effect paid Mexicana de Cobre) at a fixed rate which the Mexican firm used to pay its creditors.

The main risk that the bank creditors still have is that Mexicana de Cobre somehow fails to deliver the copper which it has mined to the long-term user. This is where multi-lateral agencies, such as the World Bank or the International Finance Corporation could help. They could, for a fee, guarantee the lenders against the risk that the project goes off the rails. All Paribas could do to limit its risks was rope in other lenders. They would come more willingly if there were a World Bank or International Finance Corporation guarantee.

## Strike a light

NEW YORK

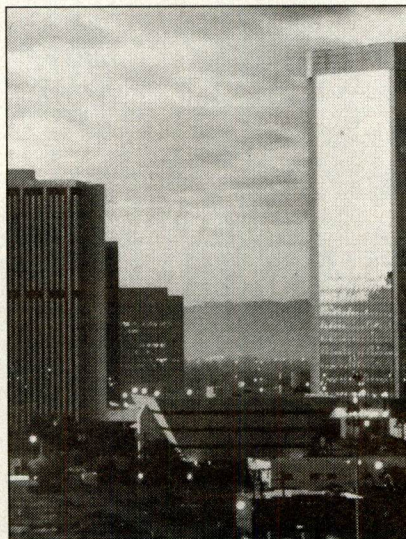
**N**ASTY things can happen when a dull but healthy utility company ventures into the glamorous but risky business of America's thrifts. In 1986, through its holding company, Pinnacle West Capital, Arizona Public Service (APS), the state's biggest nuclear-power utility, bought the state's largest savings and loan association, MeraBank. What a mistake that proved.

Pinnacle paid \$426m, or twice book value, for the thrift which was then primarily lending to families buying a home. Under its new ownership, MeraBank went on a property-lending binge—just as Arizona's property market went into free fall. Like so many others, the thrift is now insolvent and threatens the financial health of the utility.

MeraBank's problems have alarmed both the Arizona Corporation Commission, which oversees the state's utilities, and the Federal Home Loan Bank of San Francisco, which looks after thrifts in its region. In June, the San Francisco federal bank had ordered the thrift to boost its capital reserves by \$180m. That was before MeraBank reported a second-quarter

loss of \$76m.

The utility regulators are worried that Arizonans will have to pay more for electricity because of MeraBank's disastrously timed foray into property speculation. That puts Pinnacle in a legal bind. When



Let's brighten up a dull thrift

it bought MeraBank, Pinnacle signed an agreement to "maintain" the bank's required regulatory capital. With talk of MeraBank's total losses reaching \$1 billion, as well as tough new capital-adequacy requirements under the thrift legislation passed by Congress early in August, the San Francisco Federal Home Loan Bank may demand \$500m in capital by the end of the year.

Meanwhile, like many investors who bought shares in utilities for their income, Pinnacle shareholders have been yelling about dividend cuts. Their reduced payout in the second quarter may be the last dividend they receive for some time. Some are lobbying Pinnacle to spin off the ailing thrift and to refuse to transfer any capital from the utility to MeraBank. Shareholders say that the federal government should take the thrift over and taxpayers should take the loss using federal deposit insurance.

This is cheeky even by the standards of too-big-to-fail America, where nobody seems to take a loss before getting the government to underwrite it. The utility's shareholders are on a hiding to nothing. Although the taxpayer routinely bails out depositors in insolvent financial institutions, the government still balks at bailing out shareholders.

# SCIENCE AND TECHNOLOGY

## The grand finale

PASADENA, CALIFORNIA

**A**N AGE of miracles is passed. As *Voyager 2* left behind the dwindling crescents of Neptune and its moon, Triton, the first phase in man's exploration of the solar system came to an end. Of the eight planets that circle the sun along with the earth, seven have now been visited by man's robots. The space programme will doubtless provide further wonders. But the thrill of seeing a planet transformed from an unknowable dot in an earth-bound telescope to a world in its own right is now over.

Of all the craft that made this possible, none has done more than *Voyager 2*. It has far exceeded the expectations of its designers at the Jet Propulsion Laboratory in Pasadena, who run *Voyager* for NASA. That is due to luck, wise design and the ingenuity of its taskmasters, who have learnt to make it do more and more with less and less—less light as it goes farther from the sun, less signal coming back to earth, less of the ship's equipment working.

Launched in 1977, *Voyager 2*—together with its twin, *Voyager 1*—unveiled the worlds surrounding the giant planets Jupiter and Saturn. Then it went on alone to Uranus, a lesser giant, and finally to Neptune. Dr Edward Stone, who co-ordinates *Voyager's* scientific work, aptly spoke of Neptune as the last movement in a symphony, serving to recapitulate and build on earlier themes. The huge storms in Neptune's deep-blue atmosphere invite comparison to the great red spot on Jupiter. The eye-shaped maelstroms may be similar in structure, as well as appearance, though Neptune's spots have a filigree of high cirrus cloud above, unlike anything on Jupiter.

Neptune also has rings. They are not all that spectacular compared with the delicate threads around Uranus, and nothing like Saturn's magnificent display. But they may help to explain how such systems evolve. One of them (there seem to be three, plus some dust) is the most uneven ring yet discovered, with thicker arcs strung out along it at intervals, and clumps within the arcs. As well as rings, there are six new minor moons, bringing the total to eight. The intriguing thing about these otherwise-dull balls of ice is that their gravity could, in some as-yet-mysterious way, be responsible for the structure of the rings.

Each *Voyager* encounter has turned up something for a press conference to dub "the most bizarre object in the solar system". This time it was Triton, a world slightly smaller than the earth's moon. For the first time in the voyage, scientists found a world with everything—a surface and an atmosphere. The surfaces of the gas giants—Jupiter, Saturn, Neptune, Uranus—if surfaces they have, are for ever shrouded by cloud. The moons are normally airless, except for Io, around Jupiter, and Titan, which orbits Saturn. But Io's tenuous atmosphere was not detected by the *Voyagers*, and Titan's is so messy that its surface will stay hidden until visited by a joint American-European probe planned for 2003.

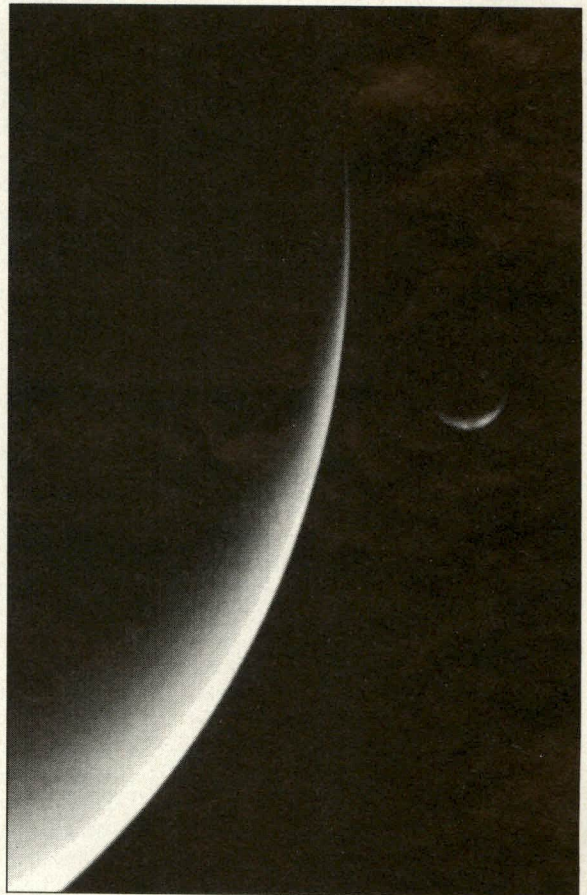
Most of what *Voyager* found out about Triton's atmosphere came from occultation experiments. As the moon Triton moved between *Voyager* and a star, the spacecraft could see how the starlight faded in the atmosphere. The same was done with sunlight and with radio signals from the probe itself, as Triton crossed its line of sight to the array of radio dishes (30 in America, four in Australia, three in Spain and one in Japan) listening to its whispered signal. Triton's atmosphere turns out to be almost as thin as Io's—about a hundred-thousandth of the atmospheric pressure on the earth—but like Titan's in composition. It is made up of nitrogen with a little methane; there is a faint smoggy haze where methane molecules have reacted with each other, spurred on by sunlight, to form hydrocarbons, which may then fall to the surface in a thin snow.

If pictures of Triton had been miraculously delivered to earth 25 years ago, its long straight ridges, tear-shaped smears, melted-chain-mail landscapes and inexplicable boundaries between terrains

of different colour and texture would have been incomprehensible. To scientists with experience of a dozen-odd major moons, these phenomena have begun to make sense remarkably quickly. Triton is like an end-of-term exam, in which the scientists have to recognise and explain things they have studied before—with a few novelties thrown in to keep them on their toes.

The views of Triton were dominated by the ice cap at its south pole, reminiscent of the ice caps on Mars. Having been in sunlight for some 30 years of springtime, the ice—mostly frozen nitrogen—is looking a bit ragged. In places it is melting through to reveal the moon's crust. In the inner solar system, planets have a rock crust. In the outer system, the satellites are made of ice. Many planetary processes remain similar, though, whatever the crust is made of.

Triton was, at some point in its history, awash with volcanism. Flat plains were formed by floods of lava from volcanic calderas; the lava was probably liquid water. There are also ridges where ice welled up from cracks in the crust, like toothpaste out of a split in the tube. This lava was thicker than the lava which formed the plains, pos-



## Bon Voyager

PASADENA, CALIFORNIA

**P**HASE one of the exploration of the outer solar system ended not because *Voyager 2* ran out of power but because it ran out of planets. *Voyager's* useful lifetime after Neptune could be 20-50 years, depending on what it is asked to do.

The performance of this 800kg robot explorer since its launch 12 years ago has astonished even the people who built it. Like its twin, *Voyager 1* (which was launched a fortnight later), *Voyager 2* was designed for a five-year life, which would have taken it only to Saturn in 1981. Uranus in 1986 and Neptune were clear profus.

*Ad astra per aspera* (to the stars, with difficulty) would have been a good motto for *Voyager 2*. Within weeks of its launch on August 20, 1977, it suffered the first in a series of equipment breakdowns that threatened the whole mission. Millions of miles out of reach, technicians on earth had to rely on what could be done by remote control through on-board computers with what now seem feeble memories. The \$700 laptop computer on which this article was written has eight times more memory than the multimillion-dollar trio of computers that guided *Voyager* across the solar system.

In the world of high technology, it is hardly surprising that a 12-year-old machine looks old-fashioned. Far more surprising is the small number of components that would be replaced if the machine were to be designed anew. Dr Charles Kohlase, who has been in charge of mission planning for the *Voyager* project since the mid-1970s, has a hypothetical shopping list of just four items: charge-coupled devices to replace vidicons (components of old television cameras) in order to take better pictures; solid-state data storage and playback equipment instead of tape recorders; solid-state gyroscopes to replace old-style spinning gyros; and more computer memory (say, one megabyte instead of *Voyager's* 65 kilobytes).

More memory would not necessarily be an unmixed blessing. According to Parkinson's Law of space science, the demands of experimenters will fill the amount of memory available, thus further complicating missions that are hard enough to begin with.

sibly because it was mixed with methane rather than ammonia.

To provoke such events Triton would have needed a hot core. Yet, because of its small size it should have been cold and dead for eons. That would be fine if the volcanism were ancient; but the lava floods appear to be comparatively recent, not more than a billion years old. One of the challenges facing *Voyager's* scientists is to explain such recent volcanism, perhaps by invoking unusual radioactivity in a rocky core, or heat generated by tidal forces.

There is evidence of another type of volcanism, possibly taking place at the moment. At first glance, the tear-shaped stains, 50km long by 20km or so wide, look like the work of winds. But Triton's atmosphere is too thin to pick things up and carry them. So some way has to be found to spray stuff into the air. The mechanism suggested makes use of volcanoes, spurting not water but nitrogen.

A purist might quibble about the term "volcano". The idea is that at a certain depth under the layers of nitrogen frost, some of the frozen nitrogen will melt. Liquid nitrogen will then percolate up through cracks, as water does in an artesian well on earth. It may be encouraged by the springtime warming. When the liquid nitrogen gets close to the surface, it boils because of the low pressure. The gaseous nitrogen expands explosively, throwing particles of ice and darker muck high up into the atmosphere, which spreads the plume out to leave the tear-shaped smear. The process does not depend on molten crustal material; to that extent the explosions are not volcanic. But discovering artesian wells on Triton would have sounded less dramatic, and been no more accurate.

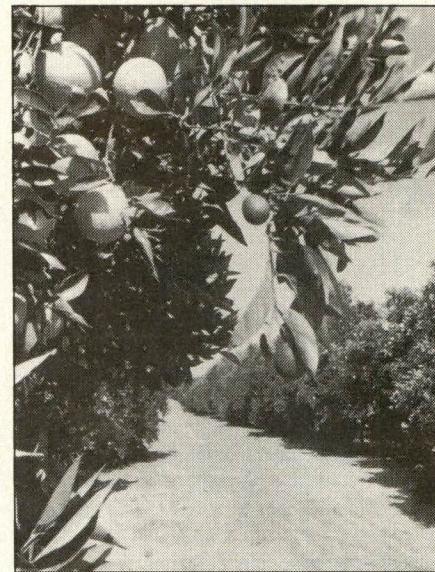
As the scientists try to pin down the mysteries of Triton, *Voyager* drifts on into the darkness, farther from the sun than any of the planets. Experiments studying the magnetic fields and thin plasmas of space—which revealed the eccentric magnetic field of Neptune, and the tenuous links between the planet's radiation belts and Triton's atmosphere—will continue to do its work for perhaps another 25 years. At some point, they should spot the heliopause, the permanent shockwave where the wind of particles from the sun hits the cold, thin interstellar medium.

When it passes that boundary, *Voyager* will have left the solar system in every sense that matters. It carries a record of the sounds of earth—whalesong, music and greetings from, among others, Mr Kurt Waldheim—on the off-chance that it should meet some spacefaring aliens. If it does, the aliens might find it hard to believe that such a primitive craft, with a tiny brain, could have changed the way a race understands its home. But it did.

## Farming inventions

# In search of the perfect prune

DAVIS, CALIFORNIA



**A**FTER more than a decade on the defensive, America's agricultural inventors are back in business. Stricter immigration laws have come to their aid. Under the Immigration Reform and Control Act of 1986, which came into full force this summer, American farmers are liable to fines or imprisonment if they hire Mexican "wet-backs" and other illegal migrants to tend or pick their crops. A resulting shortage of seasonal workers has made farmers more interested in labour-saving machinery.

Nobody is more pleased than the University of California at Davis, a university in the Sacramento Valley that was once known simply as "the cow college" but is now world-famous for its agricultural research. Dr Henry Studer, head of the university's engineering department, says that farm mechanisation is peculiarly controversial. Practically nobody, he notes, campaigns against robotics in the car, shoe or textile industries. Yet any machine that promises to raise labour productivity on farms is opposed.

The scientists at Davis are not impervious to criticism. They are now concentrating on inventions that promise to please consumers (especially health-conscious ones) as well as farmers. Intelligent nozzles on the sprayers that drench fruit trees with chemicals to protect them against insects, fungi and diseases are a case in point.

Excessive spraying is the problem. The over-use of poisons is costly and infuriates environmentalists. It also tends to hasten the speed at which insects mutate around the poison and produce super-offspring re-

Do you know enough about the countries with which you deal? All round the world, changes in the political and economic environment can affect your business.

To help you stay in touch with your international markets, The Economist Intelligence Unit publishes 92 *Country Reports*. Every quarter, up to 40 pages give you facts, analysis and short term forecasts for 165 countries.

By reviewing important political and economic developments, evaluating growth prospects, investment and consumer spending trends and by assessing business opportunities and problems, the *Country Reports* alert you to changes in the business environment and indicate others

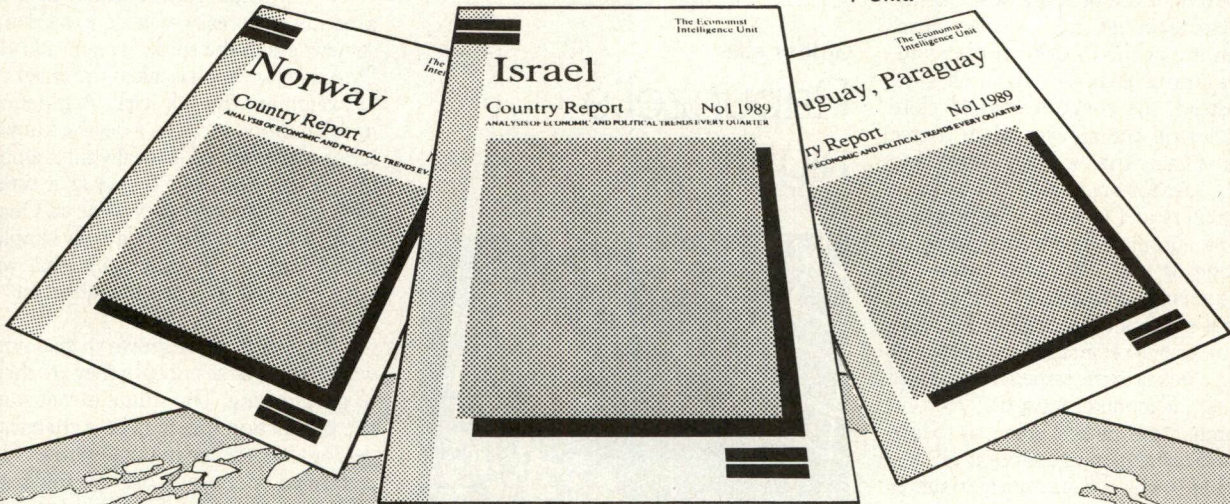
# Name your country — we cover it

on the horizon. The annual *Country Profiles* provide the essential background information.

## SPECIAL QUANTITY DISCOUNT

If you would like to subscribe to several reports or even all 92, our discount structure will save you money. The more countries you take, the higher the quantity discount you can claim. For example, if you take over 5 countries you get a 10% discount.

To subscribe to one or more of the 92 *Country Reports*, simply tick the boxes of the countries you require and send this page, complete with your name and address to The Economist Intelligence Unit.



Please tick the boxes

### Africa

- Angola, São Tomé and Príncipe
- Cameroon, CAR, Chad
- Congo, Gabon, Equatorial Guinea
- Ghana, Sierra Leone, Liberia
- Guinea, Mali, Mauritania
- Côte d'Ivoire
- Kenya
- Madagascar, Mauritius, Seychelles, Comoros
- Namibia, Botswana, Lesotho, Swaziland
- Nigeria
- Senegal, The Gambia, Guinea-Bissau, Cape Verde
- South Africa
- Tanzania, Mozambique

- Togo, Niger, Benin, Burkina
- Uganda, Ethiopia, Somalia, Djibouti
- Zaire, Rwanda, Burundi
- Zambia
- Zimbabwe, Malawi

### Far East & Australasia

- Australia
- China, North Korea
- Hong Kong, Macau
- Indochina: Vietnam, Laos, Cambodia
- Indonesia
- Japan
- Malaysia, Brunei
- New Zealand
- Pacific Islands: Papua New Guinea, Fiji, Solomon Islands, Western Samoa, Vanuatu, Tonga

- Philippines
- Singapore
- South Korea
- Taiwan
- Thailand, Burma

### Indian Sub-Continent

- Bangladesh
- India, Nepal
- Pakistan, Afghanistan
- Sri Lanka

### Latin America & the Caribbean

- Argentina
- Brazil
- Chile
- Colombia
- Cuba, Dominican Republic, Haiti, Puerto Rico
- Ecuador
- Guatemala, El Salvador, Honduras

- Jamaica, Belize, Bahamas, Bermuda
- Mexico
- Nicaragua, Costa Rica, Panama
- Peru, Bolivia
- Trinidad & Tobago, Guyana, Barbados, Windward & Leeward Islands
- Uruguay, Paraguay
- Venezuela, Suriname, Netherlands Antilles

### Middle East & North Africa

- Algeria
- Bahrain, Qatar, Oman, The Yemens
- Egypt
- Iran
- Iraq
- Israel
- Jordan

- Kuwait
- Lebanon, Cyprus
- Libya
- Morocco
- Saudi Arabia
- Sudan
- Syria
- Tunisia, Malta
- Turkey
- United Arab Emirates

### North America

- Canada
- USA

### USSR & Eastern Europe

- Czechoslovakia
- East Germany
- Hungary
- Poland
- Romania, Bulgaria, Albania
- USSR

### Yugoslavia

### Western Europe

- Austria
- Belgium, Luxembourg
- Denmark, Iceland
- Finland
- France
- Greece
- Ireland
- Italy
- Netherlands
- Norway
- Portugal
- Spain
- Sweden
- Switzerland
- United Kingdom
- West Germany

- Please enter a subscription to the Country Reports ticked. An annual subscription to one Report is: UK, Europe and Rest of World £90; North America US\$175. Postage is extra outside the UK: Europe £3.00; Rest of World £7.00; North America US\$12 for each report ordered.

- Please invoice me     Please send me further information
- I enclose payment of £/US\$

Name \_\_\_\_\_

Address \_\_\_\_\_

EWALB

**The Economist Intelligence Unit**

**The Economist Intelligence Unit  
Subscription Dept.  
40 Duke Street, London W1A 1DW  
Telephone: 01-493 6711**

**New York Office:**  
215 Park Avenue South  
New York, NY 10003, USA  
Tel: 212-460 0600 Telex: 175567

**Registered Office:**  
25 St James's Street, London SW1A 1HG  
Registered in London Number 17757671

**Business International**

GLOBAL BUSINESS INFORMATION AND ADVICE

sistant to it. Davis's proposed solution is an ultrasonic device that can tell the difference between a tall tree and small one, a thick or thin one, and can tell when a tree is missing.

The sensor is similar to the sort used in cameras to measure distance. A signal is bleeped off into the orchard, and the time it takes to return to a receiver indicates how far away the object is. The signal would, for instance, return faster from a tree that has spreading branches than a tree with short ones. It would also recognise if a tree was missing in a row and would stop spraying. The computer reacting to these signals would not reduce the pressure of the spray. Lower pressure would mean smaller droplets, which are prone to drift in the wind, sometimes into a litigious neighbour's orchard. Instead, the computer would close some nozzles on the sprayer when a tree needed a smaller-than-average dose and open extra ones for big trees.

Researchers at Davis who are working on ways to automate the testing, grading and packing of fruit also have an eye on both consumers and farmers. They want to let orchards send more tree-ripened (and so tastier) fruit to market and to ensure that all the fruit in a box is of the same standard and ripeness. At the moment most fruit in commercial orchards is picked green to reduce the risk of it over-ripening before it reaches a store. That is why American supermarket fruit is boring.

Work in progress includes a peach sorter with a computer programmed to compare the colour of a peach against the perfect one in its memory, and to grade it accordingly. The device ignores pink and red blushes because these appear on raw as well as ripe peaches. It is being programmed instead to look at the background colour of the peach, which is a more reliable guide to fruit's ripeness. If it can be perfected, the device will give orchards the option of sending ripe fruit to nearby markets and markets served by air, and sending raw fruit to distant markets, letting it ripen on the way.

Work on a multiprocessor imaging system for sorting prunes at high speed—the aim is 20 prunes a second—is further ahead. California produces more than 240,000 tonnes of prunes a year, about 70% of world production; sorting by hand is notoriously inaccurate because of the broad variations in the wrinkles and colours on the skin of dried fruit. It is also expensive, involving over 400,000 man-hours of labour in California last year.

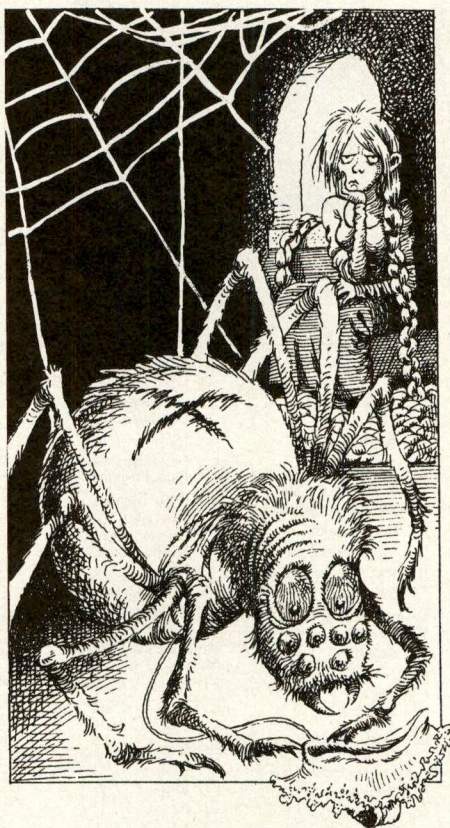
The prune imager aims to separate sound prunes from ones with mould, scabs, cracks and exposed pits. When a prune moves through the air at the discharge end of the feeding belt, its surface is scanned by three line-scan cameras mounted around an aperture in an illumination chamber. Each camera is driven by a multiprocessor that looks at the prune, decides what it is seeing

and how to sort it.

Different fruits and vegetables present their own challenges. Tomatoes cannot be judged by their skins. Sorting machines for them will have to study the internal qualities of each tomato, identifying cavities or puffiness. Growers of avocado pears yearn for a sorter that measures the oil content of the fruit. Producers of figs and dates want a device that measures the moisture content of their fruit. Plenty of jobs will go if agricultural researchers oblige, but all of them are monumentally boring. That is why farmers find it so hard to get people to do them.

## Spider silk

### Rapunzel's nightie



**R**APUNZEL took years to grow her hair into a rope to escape her plight. Spiders are less beautiful, but luckier: they can lower themselves on the fine thread of their silken draglines. Spiders produce miles of the filament in their brief lives. Can modern-day Rapunzels make use of it?

Spider silk is by far the strongest natural fibre. Its ultimate tensile strength—a measure of how hard you have to pull it before it snaps—is similar to that of the strongest nylon, or aramid fibres like Kevlar (of which bullet-proof vests are made). Now Dr Nicholas Ashley, of PA Technology in Cambridge,

has found a way to make it on a large scale.

He does not run a sweatshop of spiders. Instead, Dr Ashley uses *E. coli*, the intestinal bacteria whose willingness to make do with other creatures' genes has made them the workhorses of biotechnology. Such bacteria are not known for their ability to spin webs, so some sophisticated genetic engineering has also been applied. Spider silk is made up of proteins, which the spider's genes instruct its spinnerets to make. Different proteins make up each different type of silk; the spider uses various silks for different parts of his web and his cocoon.

Finding the genetic code for the silk proteins is no easy task. It is hidden deep somewhere in the spider's reams of DNA. So Dr Ashley's team has taken the easier course of examining the silk itself. A genetic engineer's toolbox includes a device, known as a sequencer, which chemically snips amino acids off the silk protein one at a time and sorts out what order they come in. Once this order is known, it is a relatively simple task to assemble an artificial gene that will instruct a cell to manufacture the right protein.

The bacteria are grown in vats until the workforce is large enough; they are then told to get cracking. The stimulus that starts up the production line may be a chemical trigger, or a simple rise in temperature. The silk is formed in nuggets within the bacteria. These nuggets are collected, and the protein dissolved in a solvent.

To make a fibre, the solvent containing the protein is squirted in a fine jet into water. The solvent diffuses away quickly, leaving a thread of spider silk behind it. Dr Ashley foresees a variety of applications. The fibre can be used as a reinforcement for modern composite materials, for example to make bullet-proof clothes. But the first uses will probably be more conventional and prettier. Because of the way it diffracts light, spider silk has the same rainbow hues as traditional silks. Careful tweaking of the genetic code can add stiffness or greater elasticity—stretching up to three times its own length before breaking—to its greater strength. So spider silk can make silken finery more practical.

Dr Ashley's company is now looking for a partner to take the process from the laboratory to the factory floor. Biotechnology makes the production of silk in quantity far simpler than more traditional man-made fibres. The most complex parts of the production plant are the bacteria themselves.

Chemical laboratories have been around for only a few centuries. Evolution has been trying out and developing advanced materials for eons. If biotechnology can reap the rewards of all that free research and development, spider silk may turn out to be one among many "natural" inventions.

# BOOKS AND ARTS

## Hitler's war

**A**UTHORS relish anniversaries, as moths relish light. Among many books published to mark the 50th anniversary of Nazi Germany's attack on Poland that triggered off six years of world war, a handful deserve notice. Richard Overy has written, "with Andrew Wheatcroft", *THE ROAD TO WAR*<sup>1</sup>, a companion volume to a big television series and an attempt at revisionist history. In eight chapters they review the diplomatic history of the 1920s and 1930s from the angle of eight different powers in turn, all but the first of them then classed as "great": Poland, Germany, Britain, France, Italy, Russia, Japan and the United States. This at least gets away from the received view, of a struggle originally confined to Poland and the four powers that met at Munich in 1938; the authors combine compassion with understanding, to make sound historical sense.

Scholars are aware that David Dilks is completing a major life of Neville Chamberlain, of which the first volume came out five years ago. John Charmley, who teaches English history at East Anglia University, has nevertheless written a defence of Chamberlain's foreign policy as prime minister, also of a revisionist turn. *CHAMBERLAIN AND THE LOST PEACE*<sup>2</sup> runs from Baldwin's retirement in May 1937, when Chamberlain took over, down to the outbreak of war, and seeks to show the springs of Chamberlain's actions in a more favourable light than posterity has usually cast on them. He maintains that the policy of appeasing Hitler, though it failed, "was the only policy which afforded any hope of avoiding war".

Why it failed was explained three years ago by Philip Bell, in *THE ORIGINS OF THE SECOND WORLD WAR IN EUROPE*<sup>3</sup>, still in print, which ought to have become the standard text in British and American schools and universities. There is now a much longer, even richer book to be enjoyed beside it: Donald Cameron Watt's *HOW WAR*



It didn't end like this

*CAME*<sup>4</sup>. For many years professor of international relations at the London School of Economics, he has supervised a great many students who have worked on aspects of this subject, and his own meticulous scholarship combines with that rare gift among the meticulous, a ready pen. This is a compelling study, unusually fully informed, aware above all of the dimensions of intelligence and of news management that older-fashioned diplomatic historians used to leave out. Moreover he pulls no punches, and leaves his readers in no doubt that Hitler desired war.

Of the war's course, Martin Gilbert has poured out a full account from the riches of his stores of knowledge, built up during his many years' work on the life of Churchill and from his studies of the Holocaust. His *SECOND WORLD WAR*<sup>5</sup> is even longer than Mr Watt's; it belongs to a different, less analytical tradition of history-writing. He

chronicles the war's events, week by week, sometimes day by day; he emphasises the casualties and the atrocities that are always among war's outstanding features, and so accumulates them as to make war appear what it is, an odious way of conducting mankind's affairs.

John Keegan's *THE SECOND WORLD WAR*<sup>6</sup> is different again: full of incisive comments that cut through the tangles of other men's thinking towards what must have happened. This elegant quarto, full of excellent and unfamiliar photographs, describes the main problems of politics and strategy, with vivid tactical detail now and then thrown in. This saves Mr Keegan from a fault of Mr Gilbert's, too many slips on minor points of fact. His many years as a tutor at Sandhurst have left their mark—he has little belief or interest in the part played by the underground resistance movement—but he gives full credit to the role of code-breaking.

This vital subject is further illuminated by a still longer, and still finer, account in *TOTAL WAR*<sup>7</sup> by Peter Calvocoressi, Guy Wint and John Pritchard; a new, much extended edition of a book that first came out in 1972, soon after Wint died. Mr Calvocoressi, his only co-author at that time, could not then reveal that he had himself been a senior intelligence officer at Bletchley Park, the decipher centre. From his work there, he

acquired a much fuller insight into strategy than any other historian has managed. John Pritchard (another former pupil of Donald Watt's) has expanded the Asiatic half of the book, to include the results of his researches into Japanese archives; and Mr Calvocoressi has further enhanced it with assessments of how code-breaking affected the course of the war. "Total War" promises to be much the best of all the books that salute a great war's anniversaries.

1) Macmillan/BBC; 365 pages; £15.95. To be published in America by Random House.

2) John Curtis/Hodder; 257 pages; £15.

3) Longmans; 326 pages; £8.95.

4) W. Heinemann; 736 pages; £25. Pantheon; \$29.95.

5) Weidenfeld & Nicolson; 846 pages; £18.95. To be published in America by Henry Holt; \$27.95.

6) Hutchinson; 608 pages; £19.95. To be published in America by Viking.

7) Viking; 1315 pages; £25. Pantheon; \$39.95.

## Hitler's demigods

FATHERLAND or Führer? HITLER'S GENERALS\*, a collection of studies by experts in the field, looks at the inescapable dilemma confronting the commanders of Hitler's army, the only men who could have blocked his climb to dictatorship or toppled him from power once he had seized it. Steeped in the professional militaristic tradition of the German general staff, conservative and nationalistic but politically naive almost to a man, they rose irresistibly to Hitler's bait of an expanded army and a greater German national state. In that, they reflected the aspirations of the German people. But without their acquiescence in peacetime and their outstanding skills in war, Hitler would have been a blip in world history, not the evil blot that he is.

Each of Hitler's generals came to terms with the dilemma, which was essentially a moral one, in his own way. A few became his catspaws, a few his courageous opponents. Most, in their love of the fatherland, simply went along with the Führer until military defeat and the

collapse of their dreams stared them in the face. For most of them, duty took precedence over morality, if not honour. Some of them deserve, and have received, the historical accolade of being called great soldiers and commanders. It is far harder to bestow on them, except for a handful, the mantle of moral rectitude and greatness. Flattered into thinking of themselves as demigods, they fought brilliantly for their country—but not for humanity.

Most collections of biographical essays written by different authors are pulled to discordant pieces by the temperaments and prejudices of the contributors. This one, both in its parts and as a whole, is successful. That says a great deal about the excellence of the essayists; it says even more about the discretion and skill of the editor, Corelli Barnett. Such a book seems almost certain to give rise to a series—Churchill's Generals, Roosevelt's, Stalin's, Togo's. It is to be hoped that, whatever the subject, they will be as fair in their treatment.

\*Weidenfeld & Nicolson; 497 pages; £20 and \$27.50.

with its New Age future. Smith, an entrepreneur with an over-active libido (which led to sanctified polygamy), was the first modern prophet to create a new religious tradition by reworking and recycling older mythologies. The showmanship and the sex-and-money scandals of televangelists find echoes in early Mormon history. And how much easier it would all have been for Smith, Mr Ruthven naughtily reflects, if instead of bothering with plates and stones and promised lands, he could have concentrated, like the Californian New Age channellers, on a self-engrossed search for "the innermost inness" of oneself.

Irritated, Mr Ruthven can be a shade snobbish. He rebels against the pervasive kitsch, "the mechanised gnomes with wings and Santa Claus beards nodding in time to winking lights"; a trim man, he is obsessed with the bulging bellies of middle America. He is shocked to recognise a Jacobean oak chest amid the Woolworth bibelots of a Californian cousin's mobile home.

But his main points are well taken. America's separation of church and state, he argues, has encouraged doctrines that put biblical pietism above enlightenment, personal salvation above the public good. Though America's churches are often the channel through which the country's philanthropy flows, Mr Ruthven's journey through the byways took him to prophets who preach "a spiritual Thatcherism that endows wealth with respectability, equating success with virtue". Their sermons comfort the rich, telling them to relax, enjoy themselves and, if they wish to give away money, to send it to their preachers.

### Middle East

## Western images

FROM BEIRUT TO JERUSALEM. By Thomas L. Friedman. *Farrar Straus Giroux*; 525 pages; \$22.95. To be published in Britain by Collins

FROM 1979 to 1987 Mr Thomas L. Friedman, Minneapolis-born, Oxford-educated and Jewish, reported on the Middle East for United Press International and the *New York Times*. As happens to most sensitive observers of the Middle East, his perplexity grew with the length of his stay. With time, he learnt that "any protagonist in the Middle East who is ready to talk to me cannot be worth talking to; he cannot be at the centre of what is happening." This journalistic self-awareness, as welcome as it is rare, lays bare what is perhaps the crucial drama of Mr Friedman's chronicle and analysis, the struggle of a first-rate American mind to understand a region of fierce desire and terrifying complexity.

### American religion

## Spiritual Thatcherism

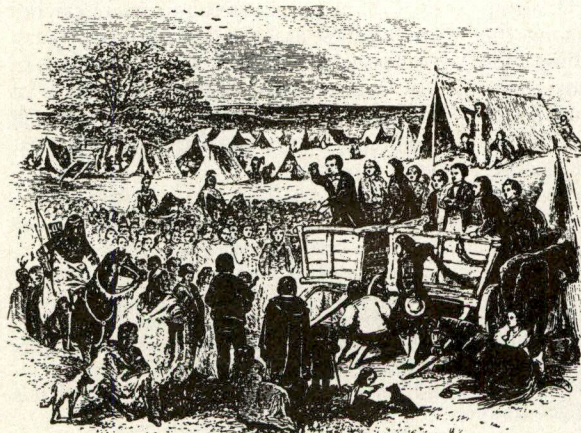
THE DIVINE SUPERMARKET. By Malise Ruthven. Chatto & Windus; 312 pages; £14.95

IN A small battered camper, "like a cow with a fox's face", Malise Ruthven explored from coast to coast the aisles of the divine supermarket, the astounding diversity of sects and cults that Americans, those most assiduous of church-goers, can choose between. A church can be found, adapted

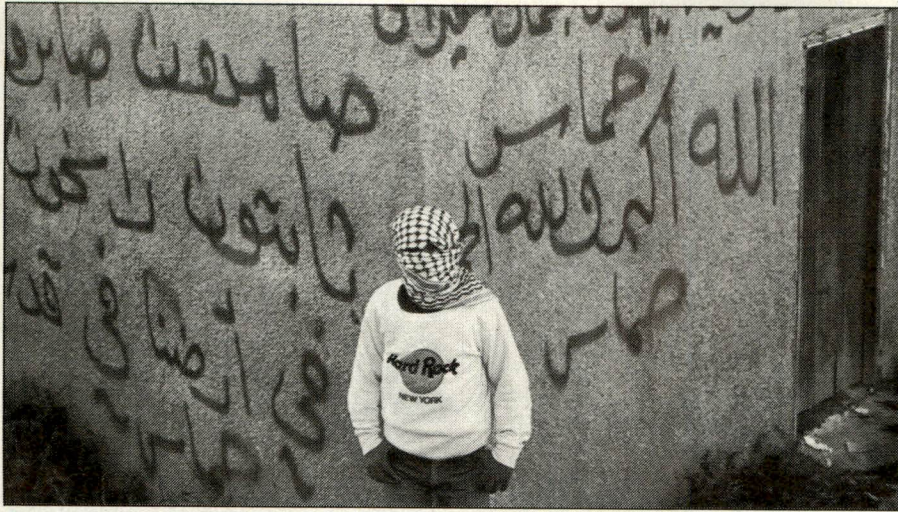
or invented to suit any taste. Ignoring the humdrum offerings of mainstream Protestantism and Catholicism, Mr Ruthven happily plundered the shelves of exotica, his curiosity sending him darting down side-aisles for quick tastes of creationism, snake-handling, Rajneeshpuram, white supremacism or what have you.

The result is a box of delights: a perceptive, gently witty guide to a world that is alien to readers reared in the nanny-like environment of an established religion. Yet, argues Mr Ruthven, some eccentric cults may simply be religions in their infancy before their myths and customs become encrusted with tradition and thus respectable. And for the non-believer (a category in which Mr Ruthven places himself) the tale of the Virgin Birth is no less bizarre than that of the Golden Plates, plus magic spectacles to translate them, that in 1823 the angel Moroni revealed to Joseph Smith, the farmboy who founded Mormonism.

The Mormon religion is central to Mr Ruthven's study: he follows the great Mormon exodus across the mountains, rivers and plains from New England to Salt Lake City, finding Joseph Smith and Brigham Young, who headed the movement after Smith's murder, pivotal figures who link America's Puritan past



The beginning of the trail



Caught in the middle

Western images of the Middle East veer from Seat of the Grail to Sheikdom of Oil to Imperialist Stomping Ground and back, along with frequent, but no less abrupt, reminders that it is also home to some of the most desperately bloody-minded regimes on this planet. The twin obsessions of petrol and prophecy which frame the Middle-Eastern policies of the western powers often blind them to the actual men and women who must live their days between the borders absentmindedly left behind by Britain and France after the first world war.

Although much is written about this region in the western press, little of substance is ever said. Mr Friedman fills the yawning gap between verbiage and understanding with grace, precision and insight. His story begins in Lebanon, ravaged by civil war between Maronite Christians, Muslims and Druze, alongside the heroic efforts of non-combatant Lebanese to preserve something resembling civilisation in the teeth of the Hobbesian jungle surrounding them. In this never-never hell, Yasser Arafat could proclaim revolutionary struggle without setting foot outside his hotel suite, lend his troops to sundry militias and promise the moon and sixpence to his followers, primarily refugees from Israel proper for whom nothing short of the maximum and least achievable objectives could suffice. Lebanon, lacking any conceivably legitimate controlling authority, was not in fact a country. The Israelis and Americans in turn would learn this grim lesson at terrible cost.

On concluding in 1984 that the daily horrors of Lebanon were so commonplace as to no longer be news, Mr Friedman took his typewriter and golf clubs to Israel where his Jewishness afforded his reporting unusual anguish and insight. He grasped the psychological dimension of the conflict between Israel and the Palestinians, each side struggling with the other's presence in what was supposed to have been its own land.

In rebelling against the daily humilia-

tions of occupation, the Palestinians have directed their fury as much at themselves as at the Israelis, literally "shaking-off" (the direct translation of *intifada*) their economic and social ties to Israel and in recent months killing one another with mounting frequency. The Israelis for their part are paralysed, gripped by memories of the Holocaust, unsure of the meaning of Jewish statehood after millennia of powerlessness and scared out of their wits by the Arab states massed around them, for whom the Palestinians are but pawns in their own lethal chess games. Israel is led, Mr Friedman says, by apparatchiks too battered and uncertain to take any chances. And this paralysis is not at all eased by the western news media's habit of projecting on to Israel their deepest guilts and fantasies, magnifying everything it does, out of all proportion.

This is very much an American's book; well-intentioned, pragmatic and ultimately hopeful, it also scans the longings and terrors besetting Arab and Jew. Why, John Foster Dulles asked, can't these Arabs and Jews work out their differences like good Christians? Why, indeed? Rather, Mr Friedman says, if America is to accomplish any peace-making, it must "think like an obstetrician, behave like a friend, bargain like a grocer and fight like a real son-of-a-bitch."

### Space exploration

## Outward bound

JOURNEY INTO SPACE: THE FIRST THIRTY YEARS OF SPACE EXPLORATION. By Bruce Murray. Norton; 381 pages; \$19.95. To be published in Britain by Norton

THE past 30 years have been an age of exploration unparalleled since the late fifteenth and early sixteenth centuries. During this time the Jet Propulsion Laboratory

(JPL), which is run by the California Institute of Technology in Pasadena, has sat like the court of Henry the Navigator, controlling NASA's Mariners and Voyagers as they sail across the solar system. Through JPL, mankind saw the glories of the planets revealed in detail. Dr Murray, who worked at JPL for many years, and as its director from 1976 to 1982, can add little in his descriptions of the storms of Jupiter, the mountains of Mars, and the other wonders of the solar system to the many lavishly illustrated books already available. What he can offer is a description of the methods, means and problems of planetary exploration.

His book is not a measured history, but rather a polemic-memoir. It is at its most inspiring near the beginning, describing researchers learning new ways to get their spacecraft around the solar system, and new things for them to do when they reached their destination. The reader is made to feel the kick that Dr Murray and his colleagues felt when devising an orbit for *Mariner 10* that sent it to Mercury not for one brief fly-by but for three separate ones. Dr Murray has a soft spot for that mission, and is almost proprietorial about Mercury, a planet others have dared to consider a little dull.

The anger comes through in the tales of his stint as director, and of the travails of two long-delayed missions, Magellan to Venus and Galileo to Jupiter, and the cancelled attempt to meet Halley's comet. His prime target is the space-shuttle programme which paralysed planetary exploration for a decade as it devoured more and more of NASA's resources. Spacecraft that could once have been launched happily on rockets were committed to the shuttle, late and unreliable even before the *Challenger* disaster. The result of these delays was that, after the *Voyagers* in 1977, America did not launch another mission until earlier this year.

Dr Murray spreads blame for the shuttle liberally. He thinks that it was a bad decision by Dr James Fletcher, NASA's administrator in the early 1970s, and a man who worried Dr Murray with his insistent demands for colour pictures of Mercury, a black and white planet being photographed in black and white. The various weaknesses of the presidents Nixon, Carter and Reagan are discussed. He is unhappy about the role played by Dr Hans Mark, a great supporter of the shuttle who was deputy secretary of the Air Force for Mr Carter and then deputy administrator of NASA for Mr Reagan (a transition that denotes exceptional political ability in itself). He blames himself for turning down an offer to become Mr Carter's NASA administrator, as which he might have been able to limit the damage.

It is sad to read that a man who so loved JPL in the 1960s should have been so glad to resign his post as its head in the 1980s. But Dr Murray finishes the book on a more hopeful note, with a brief history of the idea,

which he and others put forward and which is rapidly gaining ground, of America and Russia returning to Mars together. It would be a worthy way to follow the achievements of the late twentieth century; but the burden

of this book is that it will be as hard to prevail against the foolishness of officialdom in general and NASA in particular as it will be to surmount the huge technical difficulties of sending humans to the red planet.

Edinburgh festival

An annual astonishment

**I**N A world that is now full of festivals, Edinburgh is still the most astonishing because of its diversity and size. The international festival is the most conspicuous and important part, but it is surrounded by literally thousands of other fringe events at all levels of artistic achievement. New plays alone number about 300. The film, books, television and jazz festivals and the tattoo, all running at the same time, are substantial events in their own right. There are dozens of exhibitions. There is more happening in Edinburgh in these three weeks of August than anyone could see in a lifetime.

No one was brave or crazy enough to plan all of this. Common sense would suggest that it would be easier to find audiences if the various festivals were spread over the year. Experience proves the opposite. There is something about the atmosphere of frenzy and excitement which persuades people to go to shows during the festival which they would ignore at any other time. Despite all the visitors, 60% of the audiences are local. They seem to have an annual blow-out on the arts for these three weeks and take the rest of the year to recover.

There are two reasons for this orgy of activity. The festival began in 1947, when most places were still suffering the rationing, shortages and destruction of war. It was easy then to attract the best soloists, orchestras, opera and ballet companies and the rest to Edinburgh, so the festival at once acquired an enviable reputation. And the city might have been designed for the purpose. It has a spacious centre of striking beauty with scores of performing spaces, though few large theatres, within walking distance. It is large enough to provide spaces and audiences, but not so large that the festival is lost in the crowd. The fringe and the other things responded spontaneously to the prestige and the setting. This is a natural growth which could not be transplanted.

In all the proliferation, the international festival is still the essential core. It stages the most ambitious, and most expensive, productions in the largest theatres. Ticket sales are over £1m for 266 performances, compared with about £1.5m for the 10,000 or so on the fringe. For both, ticket prices are much lower than in such places as Salzburg and Bayreuth.



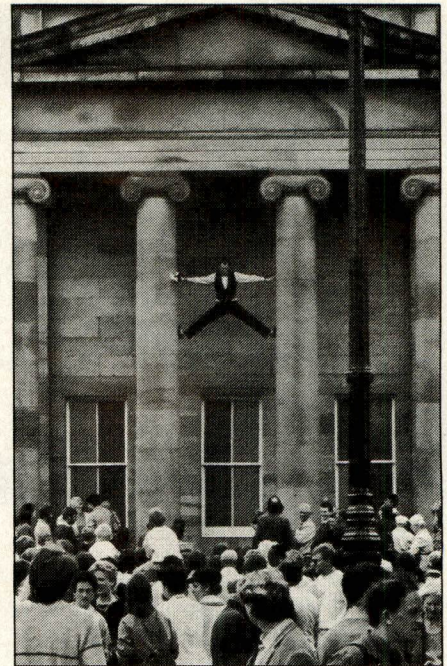
This is the sixth festival directed by Mr Frank Dunlop, who has taken it in several new directions. His predecessors had already made a virtue of necessity by looking for the new and unexpected to replace the big names which they could no longer afford.

Mr Dunlop has carried this further. He has given greater emphasis to drama, with companies from all over the world, especially Japan, Russia and Poland, all performing in their own languages, and he has increased the Scottish content. He is also fond of exploring links between countries and between different art forms. This year, he had both Oscar Wilde's "Salome" in Steven Berkoff's production from the Gate Theatre in Dublin and Richard Strauss's opera on the same theme as the first production of the festival's own Folkopera, set up on the Stockholm model. Both productions were among the hottest tickets in town, as Scotland's capital went lovably mad once more.

Funding the fun

**A**FTER years when it seemed to have settled at a sustainable level, Edinburgh's fringe—that anarchic gallery of the wonderful, the OK and the downright awful—is growing again. The size of this year's fringe will rival that of 1985, the biggest ever. The Festival Fringe Society (the closest thing to an "organiser" the fringe has) thinks that 504 groups have come to Edinburgh this year, and are giving more than 1,000 shows. Estimates of tickets sold at fringe events are always wildly unreliable, but it seems likely that this year around 500,000 people have paid for shows.

More groups and more punters might be expected to put some strain on the available venues for performance. There is some evidence that rents have gone up. Theatrical groups this year were paying from £450 (early afternoon) to £800 (prime-time) a week for a two-hour slot in a space holding an audience of 80-100, and there were reports of richer groups offering above the going rate. Yet there seems little real pressure on space; Edinburgh is littered with church halls that, with a little imagination, can be



Above the madding crowd

turned into passable theatres.

Ticket prices have moved remarkably little in four years. The highest-priced ticket on the fringe this year was £8.50; most shows were around £4, just as they were in 1985. In part, the relative price stability is accounted for by time-honoured fringe practices—bunking down in cheap lets, drawing dole while treading the boards.

The good value is also due to sponsorship. More fringe groups than ever had sponsors this year, and though most of them gave only small amounts, some were quite generous. Harp's Premier lager sponsored Mr William Burdett-Coutts's mini-festival at the Assembly Rooms to the tune of £26,000, though that was only about 5% of his costs. The man from Harp admitted to getting a good deal. Well he might. The Assembly Rooms' operation is now as professional as that of the international festival itself; its publicity material and brochures are far more informative than those produced for the senior event.

The finances of the international festival look better now than they have for some time. Out of a total budget of £3m, they now get about £500,000 from the Scottish Arts Council, and their business sponsorship (historically pathetically small) has risen to around £550,000. The sea-change, however, is in the festival's relations with Edinburgh's city council. When the once-conservative (with a big and small "C") city first elected a Labour authority in 1984, the council and festival started a two-year bicker. Earnest councillors suggested that the festival should somehow be made more "relevant" to the concerns of those on Edinburgh's grim housing estates.

Those days are now gone. The council

has moved its backing onto a three-year basis, which gives the festival some stability, and its grant of £600,000 this year was warmly welcomed. Lothian regional council chipped in, for the first time, with £130,000.

No prizes for guessing why the local authorities should have suddenly come over all cuddly. The answer is "Glasgow". The western city now has its own festival, Mayfest, its own annoyingly successful advertising campaign, and promises of new arts venues (which Edinburgh has not bothered to build) aplenty. And in 1990 it will be the European City of Culture ("How do they know the rest of the continent will be nuked?" asked a fringe comedian, Emo Phillips) with a programme of events lasting the whole 12 months.

It is quite common for journalists visiting the Edinburgh festival, desperate for a story, to suggest that the whole affair might transfer to the bigger and brasher city to the west. True to form, it happened this year as well. There is no such intention; but will next year's focus on Glasgow put Edinburgh in the shade for good? Probably not, but the competition will be good for both of them, to say nothing of the consumer of the arts.

### Stained glass windows

## The writing on the window

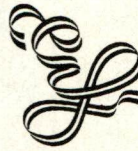
THE art of stained glass in Britain has never lacked its spoilers; in the seventeenth century these were iconoclastic Puritans who shattered their way through the nation's cathedrals. Stained glass today suffers less dramatic problems: atmospheric pollution, a legacy of insensitive restoration, the medium's fragility and, not least, the undeservedly inferior aesthetic status often accorded to it. However, the close-knit world of British stained glass, centred on about 300 professional stained-glass artists, is now in a state of shock following the news that Britain's only surviving "antique" glass manufacturer, Hartley Wood of Sunderland—a small firm with 20 employees—is being closed down this month by its large parent company, Pilkington. Patrick Reyntiens, an internationally renowned stained-glass artist, has called this "an absolute tragedy".

The "antique" (trade-term for "mouth-blown") glasses of Hartley Wood are unique, irreplaceable and beautiful, created in a manner unaltered since the great era of medieval stained glass. The glass-blower gathers a lump of molten glass at the end of a long blowpipe, which is blown into a cylindrical shape. During cooling, this is cut along its length and made to fall into a rigid sheet of flat glass. Founded in 1892, Hartley

## Press and circuses

EDINBURGH provides more than its share of the enjoyable, the unpredictable and the bizarre. Some thoughts from our correspondents:

- The city's buses continue to give some of the best entertainment in town. Protected by glass from the chaos on the streets, the matrons from Morningside or Colinton can be seen pursing their lips, assuming an air of Calvinist censure. Secretly, however, they love being scandalised. Every conversation looks as if a Mrs Mackay is saying "I didn't mind seeing that girl in a tutu on the High Street, Mrs Campbell, but what mother would send their daughter out like that in a wind like this?"
- It was the Mrs Campbells of the world who walked out disgustedly from Arkaos, the French hard-core circus performing in Leith. The girl at the fringe office was not impressed. "Och, they juggled a girl who had nothing on, but it was all very tasteful. She didnae have big bosoms at all."
- The national newspapers have de-



scended on Edinburgh with a vengeance, having discovered that in the middle of the silly season, the festival's listings provide acres of easy copy. The *Guardian* was everywhere, the *Independent* was being given away free, and the *Observer* sponsored the Fringe Sunday procession. We stick to the *Scotsman*.

● There was the usual strong entry for the much-coveted *Economist* award for Undimmed Radicalism in the Arts (universally known as "Vanessas"). The judges this year broke with tradition, and awarded the prize not to an "alternative" comedian but to the *List*, Edinburgh's weekly magazine, for its review of "When we were Young", the International Festival's exhibition of paintings of childhood. "As all proceeds go to the Save the Children Fund", said the *List*, "one could have hoped for a passing interest shown in the social realities of childhood in Thatcher's Britain—devalued children, poverty, racism, parental unemployment and sexual abuse". The midgets were bad this year, too.

Wood enjoyed the fruits of mid-nineteenth century researches from the Gothic Revival when, after centuries of neglect and worse, stained glass underwent a renaissance. The 1849 discoveries by Charles Winston of chemical formulae for medieval glass were then applied to the modern product. Pilkington took over Hartley Wood in 1982.

Compared with leading French and German mouth-blown glasses, Hartley Wood glasses are thicker and less regular in texture and pattern. A prized Hartley Wood

glass (containing gold) is "liney gold pink", whose unpredictable, exquisite colour gradations make it a work of art itself. The glasses' undulating surfaces and random bubble patterns transmit light in fascinating ways. Many stained-glass artists feel anxious and saddened by the loss of what is, in effect, their predominant palette, especially at a time of keen commissioning by secular, post-Modernist architects.

Not only artists but also restorers consider the closure tragic. The London-based Victorian Society is greatly concerned that the conservation of both medieval and nineteenth-century stained glass (including work by William Morris and Burne-Jones) will be threatened. The expertise of generations of master glass-blowers is as irreplaceable as their product.

Ironically, in 1987 Hartley Wood sent a letter to its customers, denying "the writing was on the wall... this is not Pilkington's style. Hartley Wood was purchased to maintain the tradition of glass making in the north-east and of course for its profit potential." Sadly, Pilkington felt that Hartley Wood's 1988 losses of £311,000 were not sustainable. These figures reflect the company's ill-researched launch of a new range of machine-made glasses. Indeed, since there is now a burgeoning international demand for its mouth-blown stained glass, Hartley Wood's demise could not have been more improbably timed.



A dying art?



# Call us for Books of American Publishers

1-203-966-5470

Worldwide

1-203-966-4329

FAX

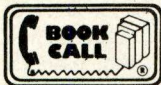
1-800-255-2665

Toll Free U.S.

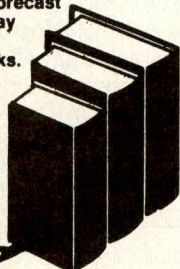
At current exchange rates books of American publishers will probably cost you less. Call for information. **BOOK CALL** is your personal bookstore at the end of the phone. Our experienced booksellers will help you with all of your special needs.

- Charge to Amex, MasterCard, Visa or send Stateside check
- We ship anywhere in the world
- Gift wrapping available
- Mail orders welcomed
- Corporate orders invited
- Open 24 HOURS every day

FREE monthly new title forecast available—the perfect way to keep up with the news about the latest U.S. books.

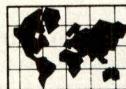
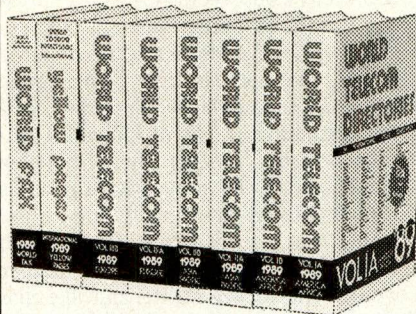


59 Elm Street  
New Canaan  
CT, USA 06840



## Get the edge in global business...

invest in complete set of **WORLD TELECOM Directories**



- ★ **WORLD TELEX**  
Over 6000 pages
- ★ **WORLD FAX**  
Over 1000 pages
- ★ **INT'L YELLOW PAGES**  
all trades / all countries

Together 8 Volumes listing  
Over 2.5 million telex & fax subscribers

Revised annually  
1989 edition OUT NOW!

Subscription & Advertising enquiries

**WORLD TELEX INTERNATIONAL LTD**  
G P O Box 7654, Hong Kong

Agents wanted in some countries. Please enquire

## Expand your business to Eastern Europe

### USSR: New Management Mechanism In Foreign Economic Relations

Reviews "perestroika" and the acceleration of the economic and social development in the USSR. Includes information on setting up foreign trade firms and transferring export-import operations.  
**E.88.II.D.5 12.00 22pp.**

### Joint Ventures As a Form of International Economic Co-operation

Assists those who wish to explore a new avenue of business co-operation with the Union of Soviet Socialist Republics by providing the regulations and instruments pertaining to joint ventures.  
**E.88.II.A.12 21.00 210pp.**

### Data Goods and Data Services In the Socialist Countries of Eastern Europe

Reviews the role of the socialist countries of Eastern Europe in data-services and data-goods, the impact of transborder data-flows on the development process and policy options.  
**E.88.II.A.20 13.50 103pp.**

### Manual on Trading with the Socialist Countries of Eastern Europe

**E.87.II.D.11 25.00 113pp.**

To order, or for a free catalogue contact:

**United Nations Publications, Sales Section**

Room DC2-853 Dept. 204  
New York, N.Y. 10017  
TEL. No. (212) 963-8302  
FAX. No. (212) 963-4116

## THE ECONOMISTS' BOOK-SHOP

CLARE MARKET,  
PORTUGAL STREET  
LONDON WC2A 2AB  
Tel: 01-405 5531  
Fax: 01-482 4873

### FOR ALL YOUR BOOK NEEDS!

We have over 40 years experience in personal, library and institutional book supply and already have thousands of satisfied customers worldwide.

Why not join them?

- Please send me your **CUSTOMER SERVICES** leaflet

Name, Address (please print) .....

.....  
.....

Country .....

## THE GREEN REVOLUTION AND THE ENVIRONMENT

The Johns Hopkins University Press  
in cooperation with the  
International Food Policy  
Research Institute

### VARIABILITY IN GRAIN YIELDS Implications for Agricultural Research and Policy in Developing Countries

edited by Jock R. Anderson and  
Peter B. R. Hazell

A distinguished group of agronomists, plant breeders, economists, geographers, and others analyze the underlying biological, climatic, and economic factors that affect yield variability. They present new evidence on changing patterns of world and national grain production as well as on yield performance of new and old varieties.

£26.50-ISBN 0-8018-3793-6

Forthcoming: **Seasonal Variability in Third World Agriculture: The Consequences for Food Security**  
edited by David E. Sahn

**TREVOR BROWN ASSOCIATES**  
Suite 7, Charing Cross Road  
London WC2H 0LN

\$45.00 JHU Press 701 West 40th St.  
Baltimore, MD 21211 USA

## Diagnosing management training and development needs: Concepts and techniques

by M. Kubr and J. Prokopenko

This book will prove invaluable for assessing the needs of managers in both the private and the public sectors. It gives not only a conceptual framework but also a rich compendium of techniques, practical guidelines and tips for large and small enterprises, management centres and institutes, as well as for those carrying out national and sectoral studies of needs.

ISBN 92-2-106399-2 £15.40; US\$24.50; SF35

## Productivity management: A practical handbook

by J. Prokopenko

"... a carefully compiled and exhaustive treatment on the subject. It approaches it from a fresh angle: that productivity has to be managed from a mixture of methods and techniques, which range from quantitative analysis and operations, as well as the behavioural sciences... a book to study and act upon. It is a most worthwhile addition to any manager's library." (*Work Study*, Birmingham, United Kingdom).

ISBN 92-2-105901-4 £17.60; US\$28; SF40

Access and Visa cards accepted.

## INTERNATIONAL LABOUR OFFICE

Vincent House  
Vincent Square  
London SW1P 2NB  
Tel: 01-828 6401  
ILO Publications Center  
49 Sheridan Avenue  
Albany, NY 12210  
Tel: (518) 436-9686



ILO Publications  
1211 Geneva 22  
Switzerland  
Telefax: (022) 98 86 85

## The Oxford Senior Managers Development Programme

7 January - 9 March 1990

The Oxford Senior Managers Development Programme is a nine-week residential programme for a limited number of experienced managers who are expected to make significant contributions to their organisation's future success.

They come from a wide range of institutions and from many different countries. Particular care is exercised in choosing an appropriate spread of international participants to give the course a world view. The programme is unique in the flexibility it affords participants to shape and manage their own learning.

### Seminars and Tutorials

The nine consecutive weeks begin with a five-week CORE period which deals with a broad sweep of general management topics set in an international context. The OPTIONS period of four weeks enables participants, with the help of a tutor, to design timetables and patterns of work to suit individual needs.



### The Oxford University Certificate in Management Studies

Completion of the Senior Managers Development Programme entitles participants to apply to the University to undertake a management project and to submit their report for examination for the Oxford University Certificate in Management Studies.

Price: £9,750 + VAT residential, all materials included.

Directors: Rosemary Stewart and Roger Undy  
Enquiries to: Elaine Pullin

Telephone: (0865) 735422  
Telex: 83147 attn TEMCOL  
Fax: (0865) 736374

Ref: M620



Templeton College  
Oxford OX1 5NY

## Distance Learning puts an MBA within reach

It is said that Britain needs at least another 10,000 MBAs every year, simply to catch up with the management professionalism of other leading nations.

Thanks to the **University of Warwick** and **Wolsey Hall, Oxford** you can join this management elite by studying largely at home. The two have combined their respective expertise in business studies and home study to devise a course which enables you to:

- Study effectively without giving up your job
- Apply immediately at work what you learn on the course
- Become a better manager...and a better qualified one

Between them, they have helped several hundreds of managers on their way...and helped their salaries too.

Why not post the coupon or telephone today to find out more? If you have an interesting career history and hold a good honours degree or equivalent, this could be the best move you ever made.

Please send me full information on the Warwick MBA course.

To: University of Warwick Distance Learning MBA Office  
Dept. C.A.2., 66 Banbury Road, Oxford OX2 6PR  
Tel: (0865) 310310 or 24-hour phone (0865) 58117  
Telex: 83539 OBS WHO Fax: (0865) 310969

Name \_\_\_\_\_

Address \_\_\_\_\_

Post Code \_\_\_\_\_



UNIVERSITY OF WARWICK

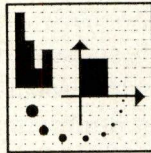
• STUDY FOR AN MBA AT HOME •

**GRADUATE PROGRAMS** **PENN**  
**IN ENERGY AND**  
**ENVIRONMENTAL PLANNING**

at the Center for Energy  
 and the Environment  
 University of Pennsylvania

- Ph.D. and M.S. in Energy Management and Policy
- M.S. in International Energy Management & Policy (A joint program with the Institut Français du Pétrole of Paris)
- M.S. in International Development & Appropriate Technology

For more information, please contact:  
 The Center for Energy  
 and the Environment  
 127 Meyerson Hall  
 210 S. 34th Street  
 Philadelphia, PA 19104-6311  
 U.S.A.  
 Phone: 215-898-7185  
 FAX: 215-898-9215  
 Telex: 710-670-0328



Arthur D. Little Management Education Institute

**Computers have their  
 place, but they can be only  
 part of the solution.**

**Learn the entire solution...**

Strategic Management of  
 Information Systems  
 October 19—November 10, 1989

*For full information, write for our course catalog*

Admissions Coordinator  
 Arthur D. Little  
 Management Education Institute  
 35K Acorn Park  
 Cambridge, Massachusetts 02140-2390 USA  
 Telephone (617) 864-5770  
 Telefax (617) 864-5411  
 Telex 921436

**Arthur D Little**

**SIGMACONSULT** and MANAGEMENT DEVELOPMENT PROGRAMS,  
 UNIVERSITY EXTENSION **UNIVERSITY OF CALIFORNIA, BERKELEY**  
 PRESENT

**FINANCIAL MANAGEMENT AND CONTROL DECEMBER 4-8, 1989**

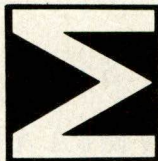
**PROACTIVE STRATEGIC MANAGEMENT FOR THE 1990'S DECEMBER 11-15, 1989**

Two dynamic seminars designed for Corporate Executive Staff  
 to help them keep ahead in an ever changing corporate environment.

**A must for Corporate Planners**

**Venue**  
**Athens, Greece**  
**Athenaeum InterContinental**

Two in a series of  
 Intensive, high level training seminars from  
 SigmaConsult, the training specialists.



**SIGMACONSULT**

For More Information, on these and other workshops,  
 Contact: Sigma Consult, Registrar  
 26 Tim. Vassou 115 21 Athens, Greece  
 Tel.: (301) 6461 628, 6448 507  
 Fax: (301) 6462 861 Tlx: 218851 PSL GR

**SPECIALISTS IN TECHNICAL TRAINING**

**TEACH YOURSELF ONE OF 40 LANGUAGES IN ONLY 60-80 HOURS**

- |            |            |
|------------|------------|
| Afrikaans  | Korean     |
| Amharic    | Norwegian  |
| Arabic     | Persian    |
| Bulgarian  | Polish     |
| Chinese    | Portuguese |
| Cambodian  | Russian    |
| Danish     | Serbo      |
| Dutch      | Croatian   |
| Finnish    | Spanish    |
| French     | Swahili    |
| German     | Swedish    |
| Greek      | Tagalog    |
| Haitian    | Thai       |
| Creole     | Tswana     |
| Hausa      | Turkish    |
| Hebrew     | Twi        |
| Hindi      | Urdu       |
| Hungarian  | Vietnamese |
| Indonesian | Yiddish    |
| Italian    | Yoruba     |
| Japanese   | Zulu       |

**RING US OR WRITE FOR YOUR FREE CATALOGUE 01-937 1647**

COURSES FOR BEGINNERS, IMPROVERS AND ADVANCED LEVELS

**AUDIO-FORUM**  
THE LANGUAGE SOURCE

Suite 32  
31 Kensington Church St.  
London W8 4LL

## City Poly

City of London Polytechnic

MSc/Postgraduate Diploma in Econometrics and Forecasting (incorporating Financial, Commodities and Macro-Economic Modelling).

**Two-year part-time evening course commencing October 1989.**

Further details from: The Admissions Office, 139 Minories, London EC3N 1NL. Telephone 01-283 1030, ext 310.

# EXECUTIVE MBA

**GRAHAM SCHOOL OF MANAGEMENT**  
SAINT-XAVIER COLLEGE / UNIVERSITY  
CHICAGO

- Offers its Master of Business Administration in Paris
- Evening classes • Week-end classes
- For professionals with an undergraduate degree
- Fall classes begin : September 18, 1989
- Financial aid is available

FOR FURTHER INFORMATION-CALL  
**(1)42.66.66.82**



**IEMI / SAINT-XAVIER College University**

71, rue du Fg-St-Honoré - 75008 PARIS



## UNIVERSITY DEGREE

**For Life, Academic & Work Experience Degrees for people who want to be more effective and secure in their Jobs or Professions.**

Earn a **BACHELOR'S MASTER'S** or **DOCTORATE** Degree by utilizing your life and work experience. College equivalent credits are given for your job, military, company training, industrial courses, seminars on business experiences. We accept college credits no matter when taken. No residency required. Our graduates are recognized for their achievements in business and industry. We will assist you in completing your degree requirements without formal classes or seminars at your own pace and time.

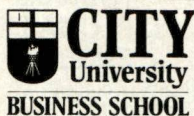
Send detailed résumé on work life and academic experience for a no cost evaluation.

Match your position with a legal degree and transcripts

As you know experience is still the best teacher. But Degrees open doors.

## PACIFIC WESTERN UNIVERSITY

800 N Sepulveda Blvd, Los Angeles, California 90049—Dept 137—USA  
Phone: 213/471-0306 Telex: 182215 Fax: 213/471-8456



## EVENING MBA

**Boost your career, without interrupting it.**

The Evening MBA has been carefully designed to avoid the career interruptions associated with doing a full-time course.

The programme is geared to the City's key areas of concern - finance, banking and international management - giving the student access to the widest pool of business knowledge and developing analytical and strategic thinking.

Our students benefit from lectures by successful businessmen, and have the immediate opportunity to apply their learning in real life business situations.

Applicants must have a good second class honours degree or the equivalent. Courses commence in February and September. For further information, please contact Debra Durston, Assistant Admissions Officer, at the City University Business School on

**01-920 0111, ext. 2238**

MAXIM'S INTERNATIONAL INSTITUTE  
SCHOOL OF HOTEL MANAGEMENT

## EXECUTIVE HOTEL MANAGEMENT DIPLOMA

For an international management career  
ONE YEAR DIPLOMA

Study in English practice and work at our famous Maxim's Institute  
Theoretical and practical training

**DAY COURSES / EVENING COURSES**

Admission : Undergraduate

Classes begin : October 1989

**MAXIM'S**

FAMOUS ALL OVER THE WORLD

**(1)42.66.66.82**

TELEX : 281 003  
FAX. 47.42.57.22

71, RUE DU FAUBOURG SAINT- HONORE, 75008 PARIS FRANCE

## CONFERENCES

### EUROPEAN CONFERENCE ON DEBT AND CONSERVATION ZURICH, 2./3. NOVEMBER 1989

Third World Debt involves both financial and ecological risks on a global scale. There is a need for a careful assessment of interactions between these risks and of ways to cope with them. This conference offers a unique opportunity for information on these issues and for dialogue between members of financial institutions and of institutions concerned with international environmental affairs.

#### Speakers and conveners include:

- Y. J. Ahmad, UNEP, Nairobi;**
- K. S. Fuller, WWF, USA;**
- F. Leutwiler, ABB, Switzerland**
- W. K. Reilly, EPA, USA;**
- R. Sevilla, Fundacion Natura, Ecuador;**
- G. Tammes, NMB Bank, The Netherlands.**

The conference is organized by: WWF-International; Environmental Studies Program, Dartmouth College, USA; Human Ecology Group, Swiss Federal Institute of Technology, Zurich.  
The organizers gratefully acknowledge the support of the German Marshall Fund of the United States.

For further information please contact: Conference Secretariat, Satellite Office Somvix, Switzerland; Fax 0041 362 51 97.

## SEMINARS

### Marketing Through Distributor Channels

ONE DAY SEMINAR STRATEGY CLINIC FROM THE  
WORLD'S LEADING DISTRIBUTION CONSULTANTS.

**London: 12 September & 11 October**  
**Brussels: 14 September**

Frank Lynn is dedicated to help firms manage change and grow their markets. These one day clinics will provide direction on the design, refinement and management of all aspects of channel marketing programmes.

It aims to benefit marketing professionals and corporate planners in a variety of firms, but particularly those needing to implement multinational marketing strategies. In order for participants to gain the maximum help from the day, numbers are limited to 15 on each.

Cost: £345.00

To: Frank Lynn & Associates Limited, 2 Queen Anne's Gate Buildings  
London SW1 9BP. Telephone (0)1-222 9055. Fax (0)1-222 1436

Name \_\_\_\_\_  
Company \_\_\_\_\_ ECON. 2/9/89  
Address \_\_\_\_\_  
Tel. \_\_\_\_\_

**Frank Lynn & Associates Limited**

## COURSES

**BACHELOR, MASTER, DOCTORATE**  
EARN A DEGREE. Use your past experience as credit toward your degree. No classes, seminars or on-campus attendance. Studies build upon your experience. Self-paced. Send Resume For No Cost Evaluation.

**Century University**  
5777 W. Century Blvd.  
Suite 605  
Dept. 90  
(213) 845-3636 Los Angeles, CA 90045



### LEARN TO SPEAK FRENCH BY TOTAL NATURAL IMMERSION

with French participants for 7  
intensive days in the DORDOGNE  
Château LA VALOUZE

J. L. Lefevre CIEL.BP.180  
24490 LA ROCHE CHALAIS, France  
Tel: 53 91 44 28

**Hotel Institute for Management**  
Montreux Switzerland  
HOTEL MANAGEMENT, TOURISM DIPLOMAS IN ENGLISH

- Hotel Courses: 2, 3 year Swiss and US Diploma.
- Tourism Course: 1 year Swiss and International Diploma.

Intakes: January, September.  
Details:  
HIM, Avenue des Alpes 15,  
CH-1820 Montreux, Switzerland,  
Tlx: 453261 HIM.  
Phone: 01041/21/9637404.  
Fax: 01041/21/9638016.

Taking the GMAT or GRE exams?  
We CAN help

For course details, contact:  
**GTAC Associates, FREE POST,**  
London W5 4BR.  
Tel: 01-993 3983/5380.

For GMAT texts, contact:  
**PasTest Service, FREEPOST,**  
Knutsford, Cheshire WA16 7BR.  
Tel: 0565 55226.

### LEARN FRENCH

The intensive way and in real immersion. This means living in one of the most picturesque regions of France and really becoming fluent. Also vacation and learning plan. Cultural programme in Paris. Winter programme on the French Riviera. State age, goal level and time available. US transfer credits.

The French and American Study Center, BP 176, Lisieux 14104, Cedex, France. Tel: 31 31 22 01.

### GERMAN FOR BUSINESS EXECUTIVES

In view of EEC opening in 1992. The intensive way to learn German in beautiful Devon Manor House, full board. Courses given by German teacher and Economist. Small classes. Translation service available.

GBC, 10 St Brannocks Road, Ilfracombe, North Devonshire.  
Telephone: 0271 66591. Fax: 0271 63020.

### IMPOSSIBLE TO SPEAK YOUR OWN LANGUAGE

Calling company executives short of time! (We know you need to learn language rapidly.) Live in your teacher's home in UK, USA, France, Germany, Spain, Italy, Taiwan. Up to 25 hours private lessons, full board and constant social contact with your teacher, his family and friends. Fluency is often achieved in only one or two weeks thanks to complete isolation from your mother tongue.

Established in 1979. Now with 3,000 teachers world-wide at your service.

Home Language Lessons, Reservations Office, 12-18 Royal Crescent, Ramsgate, Kent, UK. Tel: 0843 589853; Telex: 94016388; Telefax: 0843 590300.

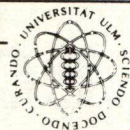
**City Poly**  
City of London Polytechnic

### LEARN JAPANESE

Evening classes or intensive two-week course.

Further details from: **Short Course Unit,**  
**City Poly, 84 Moorgate, London EC2M 6SQ.**  
Telephone: 01-283 1030, ext 324.

## UNIVERSITÄT ULM



In der Abteilung  
Unternehmensplanung  
der Universität Ulm (Studiengang  
Wirtschaftsmathematik) ist ab sofort  
eine

### Professur C 3 für Betriebswirtschaftslehre

zu besetzen.

Gewünscht werden Bewerber/innen, deren Forschung und Lehre in folgenden Teilgebieten eine inhaltliche Ergänzung zu den an der Universität Ulm bereits vorhandenen Gebieten der Betriebswirtschaftslehre darstellen:

- Controlling
- Management-Informationssysteme
- Unternehmenspolitik.

Im Falle einer Berufung soll der/die Bewerber/in nicht nur sein/ihr Fachgebiet in Lehre und Forschung selbständig vertreten, sondern auch beim allgemeinen Vorlesungsangebot des Fachs Betriebswirt-

schaftslehre mitwirken.

Bevorzugt werden Bewerber/innen, die nicht nur die akademischen Voraussetzungen für eine Professur erfüllen, sondern auch mehrjährige praktische Erfahrung in verantwortlichen Stellungen der Wirtschaft vorweisen können.

Schwerbehinderte werden bei entsprechender Eignung vorrangig eingestellt.

Bewerbungen mit den üblichen Unterlagen sind bis zum 10. Oktober 1989 an den Dekan der Fakultät für Naturwissenschaften und Mathematik der Universität Ulm, Postfach 40 66, 7900 Ulm (Donau), zu richten.

## COMMISSIONING EDITOR

The Economist Intelligence Unit, a division of Business International, needs an economically literate commissioning editor to handle part of its expanding programme of Special Reports.

The job would suit someone specialised in European economies, competent in at least one other European language and available to travel. The candidate should have a strong background in economics and business publishing, experience in working with authors, and an eye for detail.

Salary circa £20,000, according to age and experience, and usual benefits.

Please write with full cv to:

**Penelope Plowden**  
The Economist Intelligence Unit  
40 Duke Street, London W1A 1DW

*Closing date for applications October 2, 1989.*

**THE ECONOMIST  
INTELLIGENCE UNIT**

**Business  
International**  
GLOBAL BUSINESS INFORMATION AND ADVICE

## CONSTRUCTION LAW AUSTRALIA

**Morris Fletcher & Cross invites applications from talented lawyers to join one of the most active and substantial Construction Groups operating in the Australasian region. Opportunities for both senior and junior staff exist in the Firm's new Sydney office opening in October, as well as in Brisbane and Darwin.**

The Firm's Construction and Engineering Projects Group is one of the largest and most experienced in Australia and services all sectors of the construction industry at all stages of construction. The group focuses on quality documentation and effective dispute resolution for major projects in the region.

Applicants should have experience in the drafting of construction and commercial property agreements, the preparation and defence of claims and/or in dispute resolution in the construction industry.

Excellent salary packages and opportunities for advancement are offered. Applications should be sent to: Mr Doug Jones, Morris Fletcher & Cross, Riverside Centre, 123 Eagle Street, Brisbane Q. Australia 4000.

**Confidential enquiries:** To Mr David Thomas in Brisbane. Telephone (617) 833 9361.

**Morris Fletcher & Cross**  
Solicitors and Notaries

MOR 2440 B

## HEAD OF ECONOMIC RESEARCH UNIT

The London Chamber is looking for an experienced economist seeking a high profile position to head its Economic Research Unit. The successful candidate will manage a small unit responsible for the London Economy Research Programme (a study of London's economy and its prospects, sponsored by 12 major organisations) and a quarterly survey of business conditions, and providing advice on national and local economic issues.

Applicants with a good economics degree should have substantial experience in at least two of the following: economic forecasting and modelling; regional and urban economics; labour market analysis; and, the economics of financial services. Initiative, excellent communications skills, and supervisory ability are naturally prerequisites for the job.

**Applications, with a full CV and details of current salary should be sent to:**

**Deborah Jarvis,**  
London Chamber  
of Commerce and  
Industry, 69 Cannon  
Street, London  
EC4N 5AB



LONDON CHAMBER  
of Commerce and Industry

**SAVE THE CHILDREN/SUDAN**

Qualified, energetic candidates are sought for the following field positions in Save the Children's Sudan program. All positions require management experience in developing countries, and relevant graduate degree. Fluent English with strong writing skills required; Arabic desirable. Qualified couples welcome to apply.

**FIELD OFFICE DIRECTOR:** Based in Khartoum. Leads and manages two community-based integrated rural programs with total annual budget of \$5,000,000. Responsible for program strategy, design, and result; staff, systems, and policy development; fundraising and liaison with donors and government; financial control and reporting. Successful candidate will have demonstrated the above skills in progressively responsible management positions. (To be filled by March 1990).

**ASSISTANT FIELD OFFICE DIRECTOR:** Based in Khartoum. Responsible for relations with government departments, effective fundraising, program quality improvement, local recruitment and staff development, and operations in Director's absence. Requires at least five years progressively responsible management experience in developing world. (To be filled immediately).

**CO-PROGRAM MANAGER:** Based in Um Ruwaba, Kordofan region. With Sudanese co-program manager, leads team of seven sector managers and staff of 100 in implementing community-based integrated rural development program with annual budget of \$3,500,000. Responsible for liaison with government & donors, supervision of project implementation, accomplishment of program objectives and development of staff. (To be filled January 1990).

**RESEARCH AND EVALUATION MANAGER:** Based in Um Ruwaba, Kordofan region. Assists project managers in project evaluation, planning and reporting; enhances staff skills in research design, implementation, and interpretation, especially rapid rural assessment and statistical analysis. Microcomputer and training skills desirable. (To be filled immediately).

**CHILD SURVIVAL COORDINATOR:** Based in Um Ruwaba or Khartoum. Works in conjunction with two Sudanese health sector managers implementing community-based child survival program. Responsibilities include integration with government programs, fundraising & liaison with donors, and monitoring and evaluation. Successful candidate will be public health specialist with strong management background. (To be filled immediately).

Qualified candidates send resume and salary history/requirements to: Ann Jassil, Sr. Human Resources Specialist, Save the Children, 54 Wilton Road, Westport, CT 06880. Equal opportunity employer m/f.



# Senior Lecturer

## Corporate Planning

An opportunity to join an increasingly important area in training for Government departments. Based at Sunningdale, your main task will be to develop and market new courses and consultancy, and you will be responsible for their financial success.

Practical experience of corporate planning, either as an active member of a management team or in a corporate planning section, is essential. You will need an interest in the academic literature on planning and have up-to-date knowledge of best practice in the business world.

Starting salary (under review) up to £22,605 with further increments, depending on performance, up to £26,955.

For further details and an application form (to be returned by 26 September 1989) write to Civil Service Commission, Alencon Link, Basingstoke, Hants RG21 1JB, or telephone Basingstoke (0256) 468551 (answering service operates outside office hours).

Please quote ref: G/8109.

The Civil Service is an equal opportunity employer

**CIVIL SERVICE COLLEGE**

UNIVERSITY OF CALIFORNIA  
SANTA BARBARA

## FACULTY POSITIONS IN ECONOMICS

The Department of Economics has Assistant Professor positions in Finance, Economic Theory and Econometrics to begin July 1, 1990. Qualifications include a notable academic record and demonstrated ability in teaching and research scholarship. Completion of the PhD is usually required at the time of appointment. Salary dependent upon qualification.

Candidates should submit a curriculum vitae, published and pre-published work, evidence of teaching performance and at least three letters of recommendation. Send all materials to Professor Perry Shapiro, Chair, Department of Economics, University of California, Santa Barbara, CA 93106. Applications will be accepted until the position is filled. Refer to the position number when responding to this advertisement:

- EC01 Econometrics
- EC02 Economic Theory
- EC03 Finance

The University of California is an Affirmative Action/Equal Opportunity employer. Proof of US citizenship or eligibility for US employment will be required prior to employment (Immigration Reform and Control Act of 1986).

UNIVERSITY OF EDINBURGH

## SALVESEN CHAIR OF EUROPEAN INSTITUTIONS

Applications are invited from persons qualified in any of the disciplines relevant to the study of European Institutions for the Salvesen Chair of European Institutions from 1 October, 1989 or on a date to be agreed.

The Salvesen Professor will also be Director of the Europa Institute. The appointment is full-time and the salary will be within the Professorial range (currently under review).

Further particulars may be obtained from the Secretary to the University, Personnel Office, University of Edinburgh, 63 South Bridge, Edinburgh EH1 1LS, with whom applications (giving the names of at least two referees) should be lodged by 30 September, 1989.

Please quote reference number 67/89.

UNIVERSITY OF CANTERBURY  
New Zealand

## LECTURER IN OPERATIONS RESEARCH

Applications are invited for the above position in the Department of Operations Research. Applicants should have a doctoral degree with broad training in most areas of Operations Research for teaching at the undergraduate level, and a special background in at least one area for research and teaching at the graduate level. Applicants from any area in Operations Research will be considered, but preference will be given to those with backgrounds in simulation, and/or applied statistics, or mathematical programming and/or networks. The Department of Operations Research is the largest OR group in Australasia (establishment of five staff) with an emphasis on applied teaching and research.

The salary for Lecturers is on a scale from NZ\$35,000 to NZ\$42,500 (bar), and a range from NZ\$44,000 to NZ\$46,000 per annum.

Further particulars and Conditions of Appointment may be obtained from Appointments (36788), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF.

Applications close with A. W. Hayward, Registrar, University of Canterbury, Private Bag, Christchurch, New Zealand, on 29 September 1989.



University of Strathclyde  
**SCOTTISH HOTEL SCHOOL  
 LECTURESHIP IN TOURISM**

Applications are invited from candidates with tourism industry experience, a relevant postgraduate qualification, together with teaching and research interests in the area of international tourism and tourism in Third World countries for a Lectureship in Tourism. Salary: £10,458-£20,469 per annum.

**Application forms and further particulars (Ref: 71/89) are available from Staff Office, University of Strathclyde, Glasgow G1 1XQ. Closing date for applications 26 September 1989.**

**THE UNIVERSITY OF WAIKATO  
 Hamilton, New Zealand**

**PROFESSOR OF ECONOMICS**

The University is seeking a scholar with proven ability to provide academic leadership in the teaching and research activities of the Department of Economics. This vacancy is due to the pending retirement of Professor J. T. Ward.

The Department is administratively part of the School of Management Studies and also plays an important role within the School of Social Sciences. It has grown rapidly in recent years, and currently has an academic staff of 16. Members of the Department have teaching and research interests covering mainstream economics, econometrics and business economics. The Department has well-established undergraduate and graduate programmes and provides research supervision for masters and doctoral candidates.

As the Department's most senior staff member, the appointee may be required to serve as Chairperson of the Department for a fixed term.

The salary for professors is within the range NZ\$76,000 to NZ\$95,000 (approximate conversions: NZ\$1=0.35 Sterling, 0.57US and 0.75Aus). The appointee would be expected to take up the position early in 1990 or as soon as possible thereafter. Informal enquiries can be made to the Dean of the School of Management Studies (telephone (064) 71 384 016. Fax (064) 71 384 063, or Electronic Mail: b.smith@waikato.ac.nz (Internet).

The method of application and conditions of appointment are available from Appointments (36775), Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF, or from the Academic Staff Register, University of Waikato, Private Bag, Hamilton, New Zealand (Fax 064 71 560 135), Electronic Mail: h.leslie@waikato.a.c.nz (Internet). The reference number is A89/47 and applications close on 31 October 1989.

The University welcomes applications from suitable people regardless of race, creed, marital status or disability.

**THE INTER-AMERICAN DEVELOPMENT BANK**

an International Organisation which provides development financing for Latin America and the Caribbean, has an opening at its headquarters in Washington DC for an

**ECONOMIST/STATISTICIAN**

to fill the position of Chief, Statistics and Quantitative Analysis Section. Basic objectives of the position: Supervision of data compilation; management and development of IDB's data base of economic and social statistics; overseeing of the processing, analysis, utilisation, and publication of economic and social statistical data of the IDB's member countries and other countries and regions of the world that are used in the IDB's work.

The successful candidate will have a Master's degree in Statistics or Economics (PhD preferred) and at least eight years of experience relevant to the functions and responsibilities of the position, preferably in other international organisations, central banks, ministries of economic affairs or finance, or development, or economic institutions. Proficiency in two of the following languages: English, Spanish, Portuguese and French.

Starting salary \$55,180.

**To apply, candidates should write to the following address by September 30, 1989, and enclose a detailed curriculum vitae, including salary history: Employment Section (CA-EQ), Inter-American Development Bank, Washington DC, 20577, USA.**

**STAFFORDSHIRE POLYTECHNIC**

**DEPARTMENT OF ECONOMICS**

*Two Fixed Term Lectureships  
 (Up to three years)*

*Salary: Lecturer £10,071-£15,369 per annum*

*Senior Lecturer £15,369-£17,490 (bar)-£18,549 per annum (under review)*

The Department of Economics consists of 21 economists and is responsible for economics teaching across the Polytechnic on various degree and advanced diploma courses including the BA Economics, BA Business Studies, BA Sport and Recreation and the BTEC and NHC in Business Studies.

Candidates for these posts, available from 1 September, 1989, should have a higher degree and an interest in both teaching and research. Expertise in Industrial, Managerial and Financial Economics would be an advantage but not essential.

Applicants interested in fractional appointments are encouraged to apply.

**Application forms and further particulars are available from Personnel Services, Staffordshire Polytechnic, College Road, Stoke on Trent ST4 2DE. Telephone 0782 744531, ext 3211.**

**Closing date for completed applications, 20 September, 1989.**

**As an Equal Opportunities Employer, Staffordshire Polytechnic welcomes applications from all sections of the community.**

**Agricultural Economist**

The Asian Vegetable Research and Development Center (AVRDC), an internationally funded, non-profit research institution dedicated to the improvement of vegetable production, marketing and consumption in the developing countries in the tropics, is seeking candidates for the position of **AGRICULTURAL ECONOMIST**.

**Responsibilities:**

The Agricultural Economist is expected to provide the economic and social science perspective into the research and development programs of the Center. He/She will work with an international team of natural scientists in assessing priorities for vegetable research, analyzing constraints to improved vegetable production, marketing and consumption, and designing approaches to overcome these constraints. In close collaboration, particularly with partners in the developing countries, he/she is expected to develop research initiatives in such other areas as evaluation of the role of vegetables in the nutrition and welfare of low income people, forecasting of demand and supply of major vegetables, assessment of impact and distribution of benefits from vegetable research and assessment of the environmental impact of different vegetable production systems.

**Qualifications:**

Education: PhD in Agricultural Economics.

Experience: At least four years relevant experience in agricultural economics research beyond the PhD degree.

**Conditions of appointment:**

Salary and perquisites are internationally competitive. Level of appointment will be commensurate to qualifications and relevant experience. Successful candidate will reside at AVRDC's campus near Tainan City, southern Taiwan, but will travel extensively in Asia. Position is available immediately.

**Applications:**

Application closing date: 1 November, 1989.

Send undergraduate and graduate transcripts, curriculum vitae, names and contact addresses of three references and date of availability to: **Dr Emil Q. Javier, Director General, AVRDC, PO Box 205, Taipei 10099, Taiwan.**

Telex: 73560 AVRDC Tel: 06-5837801 Fax: (886-6) 5830009

## AUTOMOTIVE RESEARCHER

Major New York brokerage firm seeks European-based individual with background in European automotive industry research and direct auto industry experience as member of global auto research team. Ability to deal directly with auto industry executives is required; experience with same preferred. Work involves analysis of economic, vehicle market, manufacturing and financial trends.

Initial salary dependent upon qualifications and experience.

Interested candidates should write in confidence to:

**Jeffrey Sprague**  
**1285 Avenue of the Americas/9th Floor**  
**New York, NY 10019**  
**USA**

Please state current salary and enclose a curriculum vitae.

### Monash University

*Department of Economics*

CONTINUING LECTURER/  
 SENIOR LECTURER

In any field of economics. Applicants should have postgraduate training at a high level and considerable teaching and research potential.

Salary: Senior Lecturer \$A41,459-

\$A48,086; Lecturer \$A31,259-  
 \$A40,622.

Enquiries to Professor R. Snape (telephone (03) 565 2320). Applications including ref no 20112A, curriculum vitae and three referees to the Registrar, Monash University, Clayton, Vic. 3168, Australia, by 7 October 1989.

AN EQUAL OPPORTUNITY  
 EMPLOYER

### TONBRIDGE SCHOOL

*The Governors of Tonbridge School will be appointing a*

## HEAD

to fill the vacancy caused by the resignation of Mr C. H. D. Everett, CBE, JP, consequent upon his appointment with effect from 1 January 1990 to be initial Director-General of the Daiwa Anglo-Japanese Foundation.

By a Scheme of 11 December 1946, the Head must be a graduate of a university in the British Isles.

Applications from those of appropriate distinction are invited, not only from the school world, but also from the university world, and the world of industry, business, the professions, and the public service. The Governors do not expect to appoint a candidate over 52.

Applications for the post should be made in writing by 29 September to the Clerk to the Governors, Skinners' Hall, 8 Dowgate Hill, London EC4R 2SP, and the envelope marked 'Tonbridge Headship'. The appointment will take effect in September, 1990, or earlier, depending upon availability of the successful candidate.

# Senior Posts in the Home Civil Service

Salary up to £24,355 (in London)

Opportunities exist, mainly in London, at Grade 7 (Principal) in a variety of Government Departments. The work, which is varied and demanding, includes:

- The shaping of policy
- Resource Management
- Advice to Ministers
- Forward planning

If you have a successful track record of financial, commercial or resource management, or in administration, including local government, we offer an interesting career, accelerated progression and performance-related salaries to match.

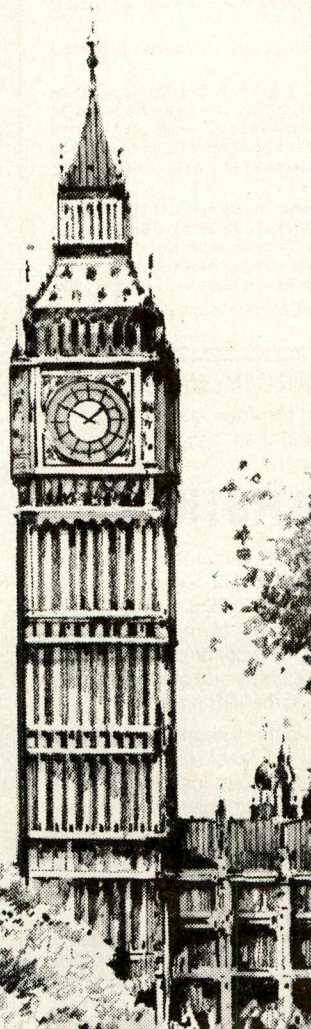
To be eligible, you must be at least 26 and under 52, and have several years' appropriate experience.

Relocation assistance may be available: salary under review.

For further details and an application form (to be returned by 4 October 1989) write to the Civil Service Commission, Alencon Link, Basingstoke, Hants RG21 1JB, or telephone Basingstoke (0256) 468551 (answering service operates outside office hours.)

Please quote ref: A/90/11/352.

The Civil Service is an equal  
 opportunity employer



## APPOINTMENTS WANTED

25. LSE/CAMB. Swedish. 2 yrs top US Inv Bnk, LDN/2 yrs top Chicago ARB Firm. US equities/options/FX/bonds seeks opportunities worldwide: Investment Mgmt/Trading/Sales/Consulting. Reply: Richards, 612 N. Michigan Ave, #217, Chicago, IL 60611 USA. Fax: (414) 658-9346.

### ENTREPRENEURIAL SPIRIT

with writing/business/environmental background, problem-solver, seeks employer with "vision" to see how my experience can assist his business. Researching my specialty. Flexible, team player, organised, self-starter. French, German. Relocation desired.

Elaine Kokoska, 126 Woods End Road, Fairfield, CT 06430. Tel: (203) 259-2757.

## INTERNATIONAL PROPERTY

**SWITZERLAND**  
*Foreigners can buy on*  
**Lake Geneva**  
*(and neighbouring France)*  
**& Mountain resorts**

Directly from SWISS BUILDERS-DEVELOPERS, you can own a CHALET/APARTMENT in MONTREUX, VILLARS, LES DIABLERETS, CRANS-MONTANA, CHATEAU-D'OEX/GSTAAD, VERBIER, JURA, Thermal Centre in the Rhone Valley etc. From SFr150,000—60% credit, at 6% interest for 5-20 years.

**REVAC S.A.**

52 rue de Montbrillant—CH-1202 GENEVA  
 Tel: 41.22.734 1540—Fax: 7341220—Telex: 22 030

# **THE TRANSKEI DEVELOPMENT CORPORATION UMTATA, REPUBLIC OF TRANSKEI, SOUTHERN AFRICA OFFERS INVESTMENT OPPORTUNITIES IN TRANSKEI**

## **NEW ECONOMIC INITIATIVES**

Since the advent of its present Government two years ago the Transkei economy has, for the first time in its history, been freely opened up to foreign investment and development.

## **FERTILE LAND, SOPHISTICATED INFRASTRUCTURE**

A fertile and beautiful land with an abundance of water, labour and recently discovered mineral resources, its industrial potential offers a more rapid return on investment than any other country in the developing world. Transkei has a relatively sophisticated infrastructure.

The following projects being planned and in feasibility study stage offer rewarding opportunities for international investment, construction and engineering skills, technological "know-how" and equipment:

- \* Tourist Hotels and time share apartments in game and nature parks bordering 280 kilometres of golden beaches and river estuaries teeming with fish—sites available with freehold title.
- \* Two free trade zones, duty and exchange control free, with low tax and harbour facilities. Sites can be reserved now. Ready 1993.
- \* A privatised duty free International Airport for lease to international concessionaires. Enquiries invited.

## **LOW TAX AND DUTY FREE INCENTIVES**

## **RECENT MINING DISCOVERIES OFFER VALUABLE OPPORTUNITIES FOR MINING INVESTMENT**

- \* Large high quality deposits of black granite.
- \* Silica sands for glass making.
- \* Titanium, Rutile, Ilmenite, Zircon in large deposits.
- \* High ash low sulphur anthracitic coal in large low cost quantities.
- \* Copper/Nickel/Platinum exploration in progress.
- \* Kimberlite deposits indicate the possibility of diamonds.
- \* The geological environment is favourable to Uranium.

## **AGRICULTURAL SECTOR OPPORTUNITIES OFFER COMPARATIVE ADVANTAGES FOR AGRO-INDUSTRY**

- \* Tea successfully grown
- \* Sugar Cane grown and exported. Local consumption of 60,000 tons per annum is imported, providing opportunity for a mill and surplus exports.
- \* Cotton successfully grown as a research crop.
- \* High potential for processed meats, poultry, fish, fruit, vegetables.
- \* Tobacco successfully grown as research crop.
- \* Well watered savannah type pastures offer potential for cattle, sheep and pigs.
- \* Soya bean, sunflower, maize and potatoes grow well.
- \* Potential for citrus and olive plantations.

## **TIMBER BASED INVESTMENT OFFERS HIGH RETURNS**

- \* Transkei is rich in soft pine, eucalyptus and wattle.
- \* Paper pulp, sawnboard and prefab timber homes available for export.
- \* Current supplies offer capacity for one more chip-board factory.
- \* 250,000 hectares available for reforestation.

## **RAPID RETURN ON INITIAL CAPITAL FOR EXPORT ORIENTED INDUSTRIES OR SERVICES SUCH AS TOURISM SELLING IN HARD CURRENCIES**

- \* Through establishment incentives which, for manufacturing industries include: relocation costs up to (at current exchange rates) Pound Sterling 234,000, training subsidies, wage subsidies, subsidised rentals (factories and key staff accommodation), transport rebates and interest on a high proportion of capital invested at market rates for 10 years, it is possible to regenerate initial investment capital in a very short period.

## **JOINT VENTURE CAN EASE THE BURDEN OF EXPANDING ABROAD. THERE ARE MANY OPTIONS**

- \* Transkei Development Corporation is willing to take equity in viable new projects.
- \* Merger with a like Transkei enterprise in the private sector can give you local expertise enabling you to serve your existing markets from a low cost Transkei base.
- \* Merger with a Transkei based Far Eastern Company could ease your products into Far Eastern markets from a competitive cost base with the possibility of adding to your product range for the UK market.

*If you are interested in attending a London Seminar in September on investment in Transkei or would like more information on Transkei contact:*

**ARTHUR O'CONNOR  
MARKETING CONSULTANT  
TRANSKEI DEVELOPMENT CORPORATION  
PRIVATE BAG X 5028, UMTATA  
REPUBLIC OF TRANSKEI**

**PHONE: 27 471 25751 or FAX: 27 471 23548 or 27 471 22874 or 27 11 884 2605**

*Sarah Hodge*  
 Sarah Hodge Recruitment Consultants  
**Need a Top Secretary?**  
 Call (01)434-0030  
 215-217 Oxford St London W1R 1AH.

  
**CUMULUS CONSULTANTS**  
 Corporate or Personal aircraft evaluation, selection, purchase or lease. US representation and expertise on all matters concerning commercial or business aircraft.  
 We are not associated with any aircraft manufacturer, dealer, broker or owner! Our 35 years in commercial aviation works only for our clients.  
 Call or fax "Cumulus" at 312-683-3113. (Auto Fax only from 2200-0800 daily Chicago time).  
  
 Cumulus Inc.  
 Hampshire, Illinois, USA.

**The Economist Intelligence Unit**  
**Managing Today's International Company: The New Role of Headquarters**  
 An analysis of historical trends and current in-depth case studies of how best to organise and manage headquarters operations in your company. The report addresses: the centralisation/decentralisation issue; the emerging roles of regional and country HQ's in multinationals; the difference between US, European and Japanese companies in organising HQ's; how HQ's can cope with M & A's business and how HQ's can provide added value to a business.  
 Price including postage: £215; US\$385; SF\$560.  
 Marketing Dept (EDXL) 215 Park Avenue South  
 40 Duke Street New York, NY 10003  
 London W1A 1DW, UK USA  
 Tel: 01-493 6711 Tel: (212) 460 0600

**OFFSHORE COMPANIES**

<b>BRITISH VIRGIN ISLANDS</b>	<b>\$950</b>
<b>GIBRALTAR</b>	<b>£395</b>
<b>GUERNSEY</b>	<b>£550</b>
<b>HONG KONG</b>	<b>£500</b>
<b>IRELAND NON-RES</b>	<b>£450</b>
<b>ISLE OF MAN</b>	<b>£350</b>
<b>JERSEY</b>	<b>£550</b>
<b>LIBERIA</b>	<b>\$950</b>
<b>PANAMA</b>	<b>\$950</b>

FULL NOMINEE, MANAGEMENT, ACCOUNTING AND ADMIN SERVICES AVAILABLE  
 FOR AN EXPLANATORY DISCUSSION AND BROCHURE CALL COLIN FOSTER OVERSEAS COMPANY REGISTRATION AGENTS LTD. COMPANIES HOUSE TOWER STREET RAMSEY ISLE OF MAN  
**TEL: 1 800 2834444 (TOLL FREE IF PHONING FROM USA).**  
**TEL: 0800 269900 (TOLL FREE)**  
**0624 815544, TELEX 628488.**  
**FAX 0624 815548**

**MARKET YOUR ENVIRONMENTAL PRODUCTS, SERVICES & INFORMATION**  
 At Earth Options (June 15-17, 1990). This is a public show in San Francisco.  
 For info, call (415) 456 3622 or write PO Box 1157, Larkspur, CA 94939.

**DIPLOMAT HOTEL**  
 2 CHESHAM STREET BELGRAVIA LONDON SW1X 8DT  
 Tel: 01-235 1544  
 Telex: 926679 DIPLM TG  
 Fax: 235 1544  
 In exclusive Belgravia within walking distance of Harrods. Provides unsurpassed opportunity for super accommodation and full English breakfast at exceptional value.  
 Single bedroom from £49.95 + VAT  
 Double/Twin from £74.95 + VAT  
 A LINBAR EXCLUSIVE HOTEL

**LONDON, EEC, USA & HONG KONG REPRESENTATION UK & OFFSHORE COMPANIES FORMATION & ADMINISTRATION**  
 Contact: McHattons (Chartered Secretaries), 48 Grafton Way, London W1P 5LB.  
 Telephone: (1) 387 2838.  
 Fax: (1) 388 4932.  
 Telex: 297320 EBS MSP.

**HOW TO LEGALLY OBTAIN A SECOND FOREIGN PASSPORT**  
 A SECOND PASSPORT OFFERS MORE FREEDOM, GREATER SECURITY AND INVESTMENT OPPORTUNITIES AND CAN HELP TO SAVE TAXES.  
 The exclusive PASSPORT REPORT is the most up-to-date guide to obtaining second passports from legal sources easily, quickly and often cheaply (if not free). Money back guarantee if not completely pleased.  
 £50 (US\$90) + delivery. Airmail £10 (US\$18) extra or surface free. Or details from: Scope Books Ltd, Box No 118, 62 Murray Road, Hordean, Hants PO8 9JL, UK.  
 Credit card orders by phone or fax accepted. Tel: (0705) 592255. Fax: (0705) 591975. Outside UK dial (International Code + 44 705).

**US ENVIRONMENTAL LAWS**  
 IF YOUR BUSINESS, PRODUCT OR MARKETING EFFORT WOULD BENEFIT FROM A THOROUGH UNDERSTANDING US ENVIRONMENTAL LAWS AND PRACTICES, I CAN HELP.  
 LICENSED ATTORNEY—EMPHASIS ON ENVIRONMENTAL LAW  
 TIMOTHY R. GABLEHOUSE, P.C.  
 1515 ARAPAHOE STREET, TOWER III, SUITE 1100 DENVER, CO 80202. TEL: (303) 820-4359. FAX: (303) 820-4459

**IMMIGRATION—CANADA**  
 One of Canada's largest investment houses offers bank or first mortgage guaranteed investments in the Investor-Immigrant Program.  
 We are leaders in the field of Investor-Immigration in Canada. Confidentiality is assured.  
**Lévesque, Beaubien Inc.**  
 C/O Mr Louis Leblanc or Mr Stan Siscoe, 1155 Metcalfe, Montreal, Canada H3B 4S9.  
 Telephone 514/879-5576 Fax 514/879-1015  
 514/879-3652

**INVESTMENT-GRADE REAL ESTATE**  
 We advise foreign institutional investors on prime Florida properties  
 Swiss Consultant Group (USA)  
 Inc. Fax: +813 254 0013

**RICE AVAILABLE**  
 Buyers of white long/medium grain rice may contact us. Major grades. Worldwide monthly shipments of 5-10,000 MT available each grade. Lowest prices. Brokers protected. Tlx/Fax firm bids.  
 USA: Fax 415 6370976. Tlx 6730750 BLC UW. Tel 415 6371574. EUROPE (SPAIN): FAX 343 2099581. Tlx 50060 NEWJ E.

**BUSINESS VENTURES INDUSTRIAL—COMMERCIAL DEVELOPMENT—MINING in EASTERN BLOCK COUNTRIES**  
 Contact: **MINETEC FINANCIAL SERVICES CORPORATION**  
 1950 Park Place, 666 Burrard Street Vancouver, BC, Canada V6C 2X8  
 Tel: 604 685 4335 Fax: 604 685 3353  
 Telex: 04 54654 VCR Code: MFS Corp

**KNIGHTSBRIDGE GREEN HOTEL**  
 A small family owned hotel in Knightsbridge which has been totally remodelled and refurbished to a high standard.  
 Suites £95 Doubles £80 Singles £65 incl VAT & SC.  
 "A comfortable, spotlessly kept little hotel in the heart of Knightsbridge"—Egon Ronay.  
 For reservations telephone 01-584 6274, or write to 159 Knightsbridge, London SW1X 7PD, fax 01-225 1635.

**US IMMIGRATION**  
 Obtain US immigration through purchase of secured and well-rewarding real estate or opening of American branch companies, etc. ALL MATTERS HANDLED BY A LICENSED US ATTORNEY/PHD ECONOMIST.  
 Contact: Edward P. Gallagher, Attorney-at-Law, PO Box 70302, Washington, DC 20088 USA. Tel: (301) 299-7269. Fax: (301) 983-3439.

EUROPE 1992—ACT NOW. From Preliminary Research through to Subsidiary set-up. Complete discretion guaranteed. Fax: London 318-1439 Attn Mr Vargas.

WANTED. Fine wine and port syndicate members. Tax free (UK). Huge profit potential. Call 0747 54315 (UK) or Fax 0747 53810 (UK) and ask for Mr Russell.

OVERSEAS POSITIONS. Hundreds of top-paying positions. All occupations. Free details. Overseas Employment Services, Dept EC, PO Box 460, Town of Mt Royal, Quebec, Canada H3P 3C7.

**LONDON South Kensington**  
 Luxury fully furnished one and two bed flats in quiet cul-de-sac off Queens Gate. Resident manager, direct dial telephones, video security and colour TV. Weekly rates from £266 to £560 plus VAT.  
 FULL DETAILS: TEL 01-225 0184. FAX 01-225 0280. TELETEXT 893095.

**NAURU BANK FOR SALE**  
 Central Pacific. No experience required. Bearer shares. No taxes. Full powers. US\$7,500. **Nauru International Services, 16929 E. Enterprise Drive, Ste 201, Fountain Hills, AZ 85268 USA. Fax: (602) 837-2643. Tel: (602) 837-7988.**

**HANDWRITING ANALYSIS**  
 Suspect Documents: Examiner of Forged/Anonymous writing. Also Personnel/Character Assessment.  
 P. Lavell  
 9 Village Close  
 London NW3 5AH  
 Tel: 01-794 6060

**US IMMIGRATION**  
 Licensed attorney.  
 Practice limited to US immigration law.  
**Judith B. Sporn, Attorney at Law**  
 125 Main St, Westport, CT 06880  
 Tel: (203)226-1223. Fax: (203)454-7890

**US HOUSING EXPORTS**  
 New homes, wall panels, components and appliances, shipped to your location.  
 Call or write for free brochure. Northern Counties, Rt 50 West, PO Box 97, Upperville, VA 22176. Telephone 703 592 3232. Fax: (703) 592-3552.

**WILLETT HOTEL**  
 32 Sloane Gardens  
 London SW1W 8DJ  
 Tel: 01-824 8415  
 Fax: 01-824 8415  
 Telex: 926678  
 Small character town house off Sloane Square. All modern facilities. Full English breakfast inclusive of very modest rates.  
 A LINBAR EXCLUSIVE HOTEL

# ECONOMIC AND FINANCIAL INDICATORS

1

**OUTPUT, DEMAND AND JOBS** Japan's industrial production rose by 6.6% in the year to July; in the year to May its retail sales were up only 3.3%. America's retail sales increased by 3.8% in the year to July; Sweden's rose by 2.5% in the year to May; Switzerland's fell 0.4% in the year to June. Five countries released unemployment statistics for July. Japan's jobless rate was 2.2% (down from 2.5% a year before), France's 9.6% (10.4%), Italy's 16.5% (16.4%), Spain's 17.4% (19.6%) and Belgium's 10.2% (11.5%). Italy's GNP rose 3.1% in the year to the first quarter.

% change at annual rate

	industrial production		GNP/GDP		retail sales [volume]		unemployment % rate	
	3 mths†	1 year	3 mths†	1 year	3 mths†	1 year	latest	year ago
Australia	-1.6	+7.3 Mar	+6.5	+5.4 Q1	+10.4	+3.1 Q1	6.1 Jul	6.8
Belgium	+5.5	+5.1 Apr	na	na	+6.3	-0.4 Dec ‡	10.2 Jul*	11.5
Canada	+3.1	+1.6 May	+3.8	+3.9 Q1	+2.1	+1.6 Jun	7.5 Jul	7.8
France	+8.2	+4.5 Jun	+4.8	+3.2 Q1	-4.4	+1.1 Dec	9.6 Jul	10.4
W. Germany	-5.4	+2.1 Jun	+12.0	+4.2 Q1	-4.4	-0.3 Jun	7.9 Jul	8.9
Holland	+6.3	+1.9 Jun	+7.8	+2.9 Q1	+4.8	+0.2 Feb ‡	6.3 Jun**	6.7
Italy	-5.0	+3.1 May	+3.0	+3.1 Q1	+7.8	-7.1 Dec ‡	16.5 Jul*	16.4
Japan	+0.4	+6.6 Jul	+9.1	+4.5 Q1	+23.9	+3.3 May	2.2 Jul	2.5
Spain	+5.5	+4.1 May	na	na	-9.2	+9.7 May‡	17.4 Jul	19.6
Sweden	-9.0	+1.5 Jun	+7.0	+2.9 Q1	+10.2	+2.5 May	1.2 Jul*	1.7
Switzerland	-21.7	+1.8 Q1	+2.2	+2.9 Q1	-25.1	-0.4 Jun ‡	0.5 Jul*	0.7
UK	-3.2	-1.9 Jun	-1.4	+1.6 Q2	+1.5	+0.2 Jul	6.3 Jul	7.9
USA	+2.6	+2.7 Jul	+2.7	+3.1 Q2	+3.5	+3.8 Jul	5.2 Jul	5.4

†Value index deflated by CPI. \*\* New series

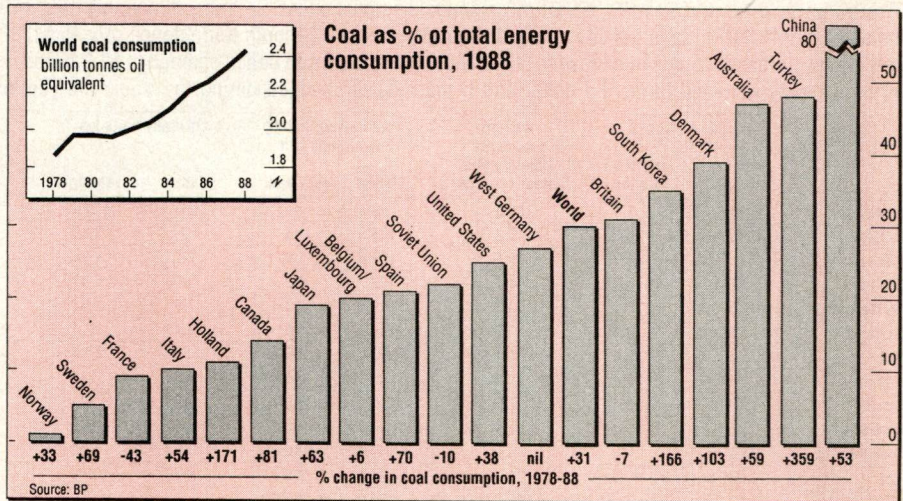
**PRICES AND WAGES** Japan's 12-month rate of consumer-price inflation remained at 3.0% in July; West Germany's edged down to 2.9% in August. Australia's consumer prices climbed 7.6% in the 12 months to May; its wholesale prices rose 7.1%. Belgium's consumer prices increased by 3.0% in the year to July; to May, its wholesale prices soared by 8.0%. Canadian wages increased by 4.7% in the year to June; Italian wages rose by 5.9% during the same period.

% change at annual rate

	consumer prices*		wholesale prices*		wages/earnings‡	
	3 mths†	1 year	3 mths†	1 year	3 mths†	1 year
Australia	+10.3	+7.6 May	+10.0	+7.1 May	+6.2	+6.8 Feb*
Belgium	+3.7	+3.0 Jul	+10.3	+8.0 May	nil	+5.4 Q1*
Canada	+8.1	+5.4 Jul	+0.6	+2.3 Jun	+2.3	+4.7 Jun
France	+4.5	+3.5 Jul	+8.9	+8.5 Q1	+5.2	+3.9 Apr*
W. Germany	+1.7	+2.9 Aug	+1.4	+2.9 Jul	+10.8	+3.7 Jun
Holland	+2.1	+1.1 Jul	+4.9	+4.2 Jun	+0.8	+1.2 Jun
Italy	+5.7	+7.0 Jul	+6.0	+6.8 Jun	+8.2	+5.9 Jun*
Japan	+7.4	+3.0 Jul	+9.8	+3.1 Jul	+5.4	+3.0 Jun
Spain	+5.8	+7.4 Jul	+2.9	+4.2 Jun	+8.2	+7.0 Dec
Sweden	+5.8	+6.1 Jul	+7.4	+8.9 Jun	+8.2	+7.0 Jun*
Switzerland	+2.4	+3.0 Jul	+3.2	+4.2 Jul	+15.7	+3.6 Q1*
UK	+9.2	+8.2 Jul	+4.7	+4.8 Jul	+7.3	+9.0 Jun
USA	+5.9	+5.0 Jul	+4.4	+5.0 Jul	+3.5	+4.2 Jul

\*Hourly wage rates in manufacturing except Australia, weekly earnings; Japan, and Switzerland, monthly earnings; Belgium, Canada, Sweden and USA, hourly earnings; UK, monthly earnings for all employees.

■ **COAL** Since OPEC first sent oil prices soaring in 1973-74, coal consumption has risen sharply. In the decade to 1988 world consumption climbed 31%, rising strongly even after oil prices halved in 1986. The amount of coal burnt by China increased by 53% during the ten-year period, to 80% of its total energy needs. Turkey, the second most coal-intensive country in our chart, now burns more than four times as much coal as in 1978. Electricity generation took up the biggest chunk of the increase. Consumption fell in the Soviet Union (where gas has gained ground), and in Britain and France (where there is now more nuclear power for electricity generation). Norway is the least coal-intensive country: it has oil and hydro-electricity aplenty, so coal accounts for only 1% of its energy consumption.



The Economist

## COMMODITY PRICE INDEX

Base-metal prices have risen sharply since mid-August, partly because of disruptions to supplies. Copper has risen most: prices topped £1,900 a tonne on the London Metal Exchange. The Bougainville copper mine in Papua New Guinea has been shut down since May 15th, and a strike at Canada's Highland Valley mine is in its eighth week. Peru's miners have also been on strike, although this now appears to be crumbling. The Cananea mine in Mexico has gone bust. The shutdowns are causing shortages at copper smelters, especially in Japan. Last year Japan imported 860,000 tonnes of copper concentrates, nearly a fifth of it from Bougainville and Highland Valley.

1985=100

	Aug 22	Aug 29†	% change on one month one year	
--	--------	---------	--------------------------------	--

Dollar index				
All items	134.8	136.4	+1.7	-9.1
Food	100.6	99.2	-3.2	-14.2

Sterling index				
All items	109.0	110.3	+6.2	-3.0
Food	81.3	80.2	+0.9	-8.5

SDR index				
All items	109.4	110.6	+4.7	-6.1
Food	81.6	80.4	-0.4	-11.4

Gold				
\$ per oz	367.00	361.75	-1.9	-15.6

Crude oil North Sea Brent				
\$ per barrel	17.20	17.13	-0.4	+17.7

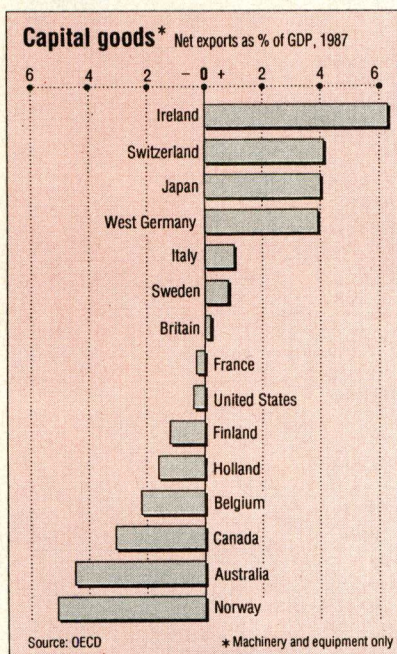
Gold				
\$ per oz	367.00	361.75	-1.9	-15.6

Crude oil North Sea Brent				
\$ per barrel	17.20	17.13	-0.4	+17.7

† Provisional †† Non-food agricultural

Footnotes applicable to all tables. All figures seasonally adjusted except \* not seas. adj. † Average of latest 3 months compared with avg. of previous 3 mos, at annual rate. na not available.

**EXPORTING MACHINERY** Business investment has been booming in most industrial countries for the past seven fat years. Real capital spending in OECD countries has grown more than twice as fast as GDP since 1982, and rose by an average of 11% last year. So exporters of machinery and equipment have done well, especially Japan and West Germany. West Germany's net exports (exports minus imports) of capital goods amounted to 3.9% of its GDP in 1987 (the latest figures available); Japan's totalled 4.0%. All the big economies except Canada are net capital exporters or close to balance; smaller economies tend to be net importers. A new star is Ireland where net exports of capital goods were 6.3% of GNP in 1987, thanks to its blossoming computer industry. As recently as 1982 it was a net importer.



**WORLD BOURSES** Wall Street broke through its pre-crash high, rising 2.9% in the week. A weaker yen and pessimistic forecasts of company profits left Tokyo down 1.2%. London, fearing higher interest rates, struggled up 0.4%. Hongkong, fretting about China once more, tumbled 2.2%.

**Stock price indices**

	Aug 29	1989		% Change on				
		high	low	one week	one year	record high	31/12/88 in local currency	in \$ terms
Australia	1781.8	1781.8	1412.9	+ 3.3	+ 12.7	-22.7	+19.8	+ 7.2
Belgium	6511.1	6511.1	5519.3	+ 0.6	+ 33.8	nil	+17.0	+ 7.5†
Canada	3991.4	4019.7	3350.5	+ 1.4	+ 21.9	- 3.0	+17.7	+19.8
France	520.8	523.2	417.9	+ 2.2	+ 49.8	- 0.6	+25.3	+16.3
W.Germany	1971.4	1990.1	1595.7	- 0.2	+ 34.5	-13.5	+19.3	+ 9.3
Holland	202.9	207.0	166.7	- 0.5	+ 31.4	- 2.0	+22.4	+12.3
Hongkong	2488.0	3309.6	2093.6	- 2.2	+ 2.0	-37.0	- 7.4	- 7.5
Italy	731.4	732.5	577.5	+ 1.3	+ 39.6	-19.5	+24.0	+16.5
Japan	34687.7	35140.8	30183.8	- 1.2	+ 26.1	- 1.3	+15.0	+ 0.5
Singapore	1342.5	1387.0	1030.7	- 2.1	+ 31.6	-10.8	+29.3	+27.7
South Africa	2820.0	2838.0	1961.0	- 0.3	+ 73.0	- 0.3	+44.3	+29.3†
Spain	322.5	322.5	268.6	+ 2.1	+ 13.4	- 0.9	+17.5	+ 9.8
Sweden	4570.5	4660.3	3333.9	+ 2.9	+ 54.7	- 1.9	+32.7	+23.7
Switzerland	821.7	825.8	613.1	+ 1.3	+ 48.6	- 0.5	+36.1	+22.5
UK	2380.8	2397.4	1782.8	+ 0.4	+ 35.7	- 2.6	+32.8	+16.3
USA	2726.6	2743.4	2144.6	+ 2.9	+ 33.8	- 0.6	+25.7	+25.7

†Converted at financial rate

**MONEY AND INTEREST RATES** France's narrow-money supply, M1, increased by 5.5% in the year to June; broad M3 rose by 7.7%. In the same period Italy's narrow money expanded by 16.6%; its broad money increased by 10.4%. French banks raised prime-lending rates by two-fifths of a point.

	Money supply†		Interest rates % p.a. (Tuesday, except bonds which are previous Friday)								
	% rise on year ago		Money market		Commercial banks		Bond yields		Eurocurrency		
	Narrow [M1]	Broad	Overnight	3 months	Prime lending	Deposits 3 months	Gov't long-term	Corporate	Deposits 3 months	Bonds	
Australia	+ 7.8	+29.8	Jul	17.50	17.96	20.25	17.80	12.97	13.97	17.50	13.77
Belgium	+ 1.7	+ 3.9	04	8.00	8.45	10.75	8.15	8.45	8.45	8.50	8.51
Canada	+ 3.2	+10.2	Jul	12.25	12.25	13.50	12.25	9.46	10.26	12.00	10.27
France	+ 5.5	+ 7.7	Jun	9.00	9.13	10.00	11.50	8.46	8.87	9.13	9.01
W. Germany	+ 4.5	+ 5.1	Jun	6.70	7.15	8.50	6.51	6.95	6.95	7.06	6.95
Holland	+ 4.3	+11.2	May	7.06	7.27	9.75	7.27	7.14	7.30	7.25	7.09
Italy	+16.6	+10.4	Jun	12.50	13.00	14.00	na	11.67	11.65	12.25	11.03
Japan	+ 2.7	+ 9.4	Jun	5.28	4.82	4.88	2.04	5.07	5.13	5.44	5.18
Spain	+17.7	+12.8	Jun	15.16	15.29	16.25	7.75	13.11	14.18	15.15	na
Sweden	na	+ 6.2	Jun	11.70	12.05	12.50	11.75	11.20	11.88	11.63	11.29
Switzerland	- 8.3	+ 6.0	May	7.25	7.25	8.50	6.50	5.23	5.73	7.31	5.35
UK	+ 5.2††	+16.7††	Jul	13.94	13.94	15.00	13.94	9.55	11.11	13.91	10.60
USA	- 0.7	+ 4.2	Jul	8.88	8.68	10.50	8.80	8.18	9.09	8.94	8.96

**Other key rates in London** 3-mth Treasury Bills 13.3%, 7-day Interbank 13.9%, clearing banks' 7-day notice 4.0%. Eurodollar rates (Libor): 3 mths 9.0%, 6 mths 9.0%.

†M1 except UK M0; M3 except Belgium, Holland, Italy and Sweden M2, Japan M2 plus CDs, UK M4. Definitions of interest rates quoted available on request. Sources: Banco Bilbao Vizcaya, Chase Manhattan, Banque de Commerce (Belgium), Credit Lyonnais, Credit Lyonnais Bank Nederland, Svenska Handelsbanken, ANZ Bank, CSFB, The WEFA Group. These rates are indicative only and cannot be construed as offers by these banks. ††New series.

**TRADE, EXCHANGE RATES AND RESERVES** Canada's surplus on visible trade shrank to \$106m in June; its 12-month surplus fell to \$5.6 billion. In the same month Italy's trade deficit narrowed to \$738m, but its 12-month trade deficit rose to \$13.6 billion (during 1988, it has just been revealed, Italy's total current-account deficit rose to \$5.4 billion). France's trade deficit climbed to \$1.2 billion in July, while its 12-month deficit widened to \$6.9 billion. In trade-weighted terms the dollar and D-mark hardly budged during the week; the yen lost 0.6%, while sterling fell 0.2%.

	trade balance‡ \$bn		current-account balance \$bn latest 12 mths	trade-weighted‡‡ exchange rate		currency units per \$		currency units			foreign reserves†† \$bn			
	latest month	latest 12 months		latest	year ago	latest	year ago	per £	per SDR	per ecu	Jun	year ago		
Australia	- 0.33	Jun	- 3.4	- 14.0	Jul	na	na	1.31	1.24	2.07	1.63	1.40	12.4	12.4
Belgium	+ 0.29	Mar	+ 0.3	+ 3.2	01	105.9	106.1	40.6	39.2	64.3	50.9	43.4	9.6	8.7
Canada	+ 0.11	Jun	+ 5.6	- 10.1	01	105.6	98.8	1.17	1.24	1.86	1.47	1.25	15.1	15.4
France	- 1.17	Jul	- 6.9	- 4.8	01	99.7	99.8	6.53	6.33	10.3	8.21	7.00	26.8**	31.5
W. Germany	+10.80	Jun	+ 75.1	+ 53.5	Jun	112.5	113.4	1.94	1.87	3.07	2.44	2.08	55.5	64.8
Holland	+ 0.23	May	+ 4.3	+ 5.9	01	110.1	110.5	2.18	2.11	3.46	2.75	2.34	15.5	14.6
Italy	- 0.74	Jun	- 13.6	- 5.4	04	99.6	96.7	1390	1386	2202	1749	1491	39.4	27.1
Japan	+ 5.75	Jun	+ 92.4	+ 72.3	Jun	138.1	145.0	143	134	227	180	153	88.1	86.9
Spain	- 2.00	Jul	- 25.5	- 7.5	Jun	103.1	98.1	121	124	192	152	130	39.1**	33.8
Sweden	+ 0.28	Jul	+ 3.8	- 2.9	May	96.5	95.2	6.57	6.46	10.4	8.24	7.02	8.4	8.4
Switzerland	- 0.55	May	- 6.3	+ 5.5	01	107.1	110.0	1.67	1.58	2.65	2.10	1.79	21.1	24.4
UK	- 4.00	Jul	- 40.8	- 31.7	Jul	91.4	95.2	0.63	0.59	—	1.74	1.48	37.2	40.4
USA	- 8.17	Jun	-112.6	-125.2	01	71.2	69.2	—	—	1.58	1.25	1.07	49.2	30.0

‡Australia, France, Canada, Japan, UK and USA imports fob, exports fob. All others cif/fob. ‡‡ Bank of England index 1985 = 100 New series. †† Excluding gold. \*\*May.

150 cities  
in 18 countries  
on 4 continents  
have one thing  
in common:

Us.

We're called Trans World Airlines.

But don't take the "world" part too literally. Because even though we fly to cities all over Europe and the Middle East, we're not just an international airline.

**The TWA network includes  
over 125 cities in the U.S. alone.**

And that number is growing all the time.

So, whether your travel plans take you across the country or across the ocean, fly with the airline that's equally at home both here and abroad. Call your travel agent, or TWA at 1-800-221-2000.



Today's TWA

---

Find out how good we really are.®

*“Find us computers that will let us do many jobs at once, Sinkfield, and it’ll be another feather in your cap.”*



# How're you going to do it?

No one ever made their mark in business by doing just one thing at a time. So to stay competitive, you need your computers to do a lot of business tasks at once.

**The Genius Of Micro Channel.** That's why IBM developed the Personal System/2® computers with Micro Channel™. Micro Channel is like a multilane highway, so information can travel in lots of directions at once. With optional bus master cards, it's like having many computers in one, some managing printers and fax machines, another busy calculating a spreadsheet and others working on graphics or transferring data. And Micro Channel



# PS/2 it!

Does all of this with remarkable speed and reliability. Naturally, a PS/2<sup>®</sup> with Micro Channel runs DOS applications, and add OS/2 to this equation, and the benefits of multitasking can make you and your people even more productive.

**The Solution Is IBM.** The PS/2 with Micro Channel will provide you with solutions not only today but far into the future. See your IBM Authorized Dealer or IBM marketing representative. For a dealer near you, call 1 800 IBM-2468, ext. 139. And see how much more you can do when you PS/2 it!

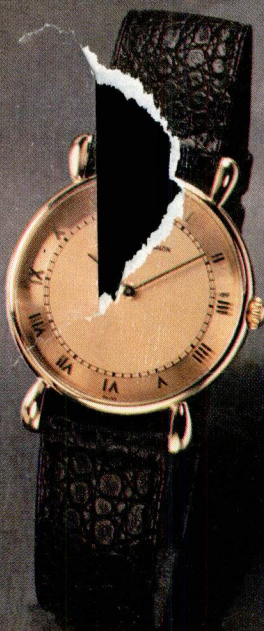


**IBM**  
®



# VACHERON CONSTANTIN

The World's oldest Watch Manufacturer  
Geneva since 1755.



**TOURNEAU**<sup>®</sup> NEW YORK  
BAL HARBOUR  
GENEVA

Madison Ave. & 52nd St., 500 Madison Ave., NYC 10022.  
Seventh Ave. & 34th St., 200 W. 34th St., NYC 10001.  
Bonwit Teller, at Trump Tower, Fifth Ave., New York, NY.  
Bal Harbour Shops, 9700 Collins Ave., Bal Harbour, FL 33154.  
Corporate Sales/Executive Gifts (212) 888-2955.

Shop at home... Major credit cards welcome. (212) 758-3265. Outside NY 1-800-223-1288.