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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: 13704
Folder ID Number: 13704-002

Folder Title:
University of Tennessee, Knoxville 2/2/90 [OA 8310] [1]

Stack:	Row:	Section:	Shelf:	Position:
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BOB

UNIVERSITY OF TENNESSEE, KNOXVILLE
ALUMNI GYMNASIUM
FRIDAY, FEB. 2, 1990, 3:05 P.M.

THANK YOU, LAMAR [[ALEXANDER]] AND ALSO GOVERNOR McWHERTER. AND I'M PLEASED TO BE HERE WITH MY EDUCATION SECRETARY, LAURO CAVAZOS, AND MY SECRETARY OF ENERGY JIM WATKINS -- BOTH ARE DOING AN OUTSTANDING JOB FOR AMERICA. AND ALSO ALVIN TRIVELPIECE, DIRECTOR OF THE OAK RIDGE NATIONAL LABORATORY. ALSO HERE TODAY, CONGRESSMEN JIMMY QUILLEN, JOHN DUNCAN, DON SUNDQUIST, MARILYN LLOYD AND JIM COOPER. AND KNOXVILLE'S MAYOR, VICTOR ASHE.

SORRY WE WERE A LITTLE LATE GETTING IN. BUT YOU KNOW HOW IT IS ON THIS CAMPUS. EVEN I CAN'T FIND A PARKING PLACE. \\\

IT'S GREAT TO BE BACK IN TENNESSEE. I'M VERY PROUD OF THIS STATE, AND THIS UNIVERSITY. AND I HEAR SOME OF YOU NOTICED THE T-SHIRT I HAD ON WHILE JOGGING DOWN IN TEXAS IN DECEMBER -- THE "BIG ORANGE" COLORS OF THE TENNESSEE VOLUNTEERS. \\\

BACK IN WASHINGTON THEY DEBATED WHICH MOVE TOOK MORE GUTS -- INVADING PANAMA, OR GOING TO TEXAS WEARING A BIG ORANGE T-SHIRT.

I GOT THE SHIRT IN WASHINGTON WHEN PAT SUMMITT CAME TO THE ROSE GARDEN LAST APRIL WITH TENNESSEE'S LADY VOLUNTEERS -- THE 1989 NCAA NATIONAL CHAMPIONS. \ \ \

AND WHEN THEY CAME TO WASHINGTON THE LADY VOLS HAD ONLY ONE REQUEST. NOT TO SEE THE OVAL OFFICE. NOT TO SEE THE WRIGHT BROTHERS PLANE. NOT EVEN GEORGETOWN AT NIGHT. WHAT THEY WANTED TO SEE WAS MILLIE'S NEW PUPPIES. \ \ \

OF COURSE WE SAID YES. BUT NOW IT'S MY TURN. AND AS LONG AS I'M AT U.T., IT SEEMS I OUGHT TO GET TO MEET "SMOKEY." \ \ \

I AM PROUD OF TENNESSEE, AND YOUR GREAT SPORTS TRADITIONS. BUT THE TRUTH IS, WHAT MAKES THIS UNIVERSITY SO SPECIAL SAYS A LOT ABOUT WHAT MAKES AMERICA SO SPECIAL. IT'S NOT THE WINNER'S TROPHY AT THE END OF THE QUEST. IT'S THE QUEST ITSELF. AND IN TENNESSEE, AS IN AMERICA, THAT MEANS THE QUEST FOR EXCELLENCE.

AT U.T., THE QUEST FOR EXCELLENCE STARTS NOT ON THE BASKETBALL COURT OR THE FOOTBALL FIELD BUT IN THE CLASSROOM. MAYBE YOU HEARD THAT AT THE WHITE HOUSE, I BRAGGED AS MUCH ABOUT THE LADY VOL'S' 14 YEARS WITH A 100 PERCENT GRADUATION RATE AS I DID ABOUT THEIR BASKETBALL CHAMPIONSHIP.

EARLIER THIS WEEK, I ISSUED MY FIRST FORMAL BUDGET AS PRESIDENT, A BLUEPRINT FOR THE YEAR AHEAD. AND TWO DAYS AGO, I STOOD IN THE U.S. CAPITOL -- STOOD BEFORE THE AMERICAN PEOPLE -- AND REPORTED TO YOU ON THE STATE OF THE UNION.

[[BUT DON'T WORRY IF YOU MISSED THE SPEECH --
YOU'RE NOT GOING TO HEAR THE TWO WORDS THAT STRIKE
TERROR IN THE HEARTS OF EVERY COLLEGE STUDENT: \\
"POP QUIZ!" \\\]]

AT THE HEART OF MY ADDRESS WAS A SENSE OF
CONFIDENCE THAT AMERICA TODAY IS SECOND TO NONE -- AND
SENSE OF COMMITMENT, A PLAN TO KEEP AMERICA SECOND TO
NONE IN THE YEARS AHEAD.

THE FOUNDATION FOR OUR PLAN -- THE FOUNDATION FOR
OUR FUTURE -- IS ANCHORED BY A CORNERSTONE WE CALL
"EDUCATIONAL EXCELLENCE."

EDUCATION IS OUR MOST ENDURING LEGACY, VITAL TO
EVERYTHING WE ARE AND CAN BECOME. AND MY BUDGET CALLS
FOR RECORD FUNDING, REFLECTING THIS BELIEF. BUT AS I
SAID WEDNESDAY NIGHT, REAL IMPROVEMENT IN OUR SCHOOLS
IS NOT SIMPLY A MATTER OF SPENDING MORE. IT IS A
MATTER OF ASKING MORE -- EXPECTING MORE -- OF OUR
SCHOOLS, OUR TEACHERS, OUR KIDS -- AND OF OURSELVES.

YOU IN TENNESSEE KNOW THAT GOALS AND HIGH EXPECTATIONS WORK. FIVE YEARS AGO, GOVERNOR ALEXANDER TOLD TENNESSEE'S EIGHTH GRADERS: "IF YOU WANT TO GO TO STATE UNIVERSITIES -- YOU'RE GOING TO HAVE TO TAKE MORE MATH AND SCIENCE."

THERE WAS A GOOD DEAL OF GRUMBLING AT FIRST. BUT TODAY, ALMOST ALL FRESHMAN ARE MEETING THOSE REQUIREMENTS.

AS A RESULT, ADMISSION SCORES ARE UP. RETENTION RATES ARE UP. AND BEST OF ALL -- 41 PERCENT MORE STUDENTS ARE TAKING SCIENCE AND MATH IN THE HIGH SCHOOLS THAN WERE TAKING THOSE SUBJECTS FIVE YEARS AGO. YOU EXPECTED MORE. SO YOU GOT MORE.

I BELIEVE WHAT WORKED FOR TENNESSEE WILL WORK FOR AMERICA. AND WEDNESDAY NIGHT, I ANNOUNCED AMERICA'S EDUCATION GOALS -- GOALS DEVELOPED WITH THE GOVERNORS OF ALL FIFTY STATES.

PART OF THE ANSWER MEANS GETTING BACK TO BASICS. RECENTLY ONE KID WAS ASKED IF HE KNEW WHAT THE "THREE R'S" WERE. HE SAID, "SURE: READING. 'RITING. AND REMOTE CONTROL." \\\

WELL, JUST AS WE'RE RE-DOUBLING OUR EFFORTS TO BOOST EDUCATION, SO WE'VE DOUBLED THE "THREE R'S" AS WELL. WE HAVE SIX GOALS -- "SIX R'S" FOR EDUCATION IN THE NINETIES.

THE FIRST IS READINESS. BY THE YEAR 2000, EVERY CHILD IN AMERICA WILL START SCHOOL READY TO LEARN. AND WE'VE CALLED FOR A RECORD INCREASE -- AN EXTRA HALF-BILLION DOLLARS TO ENSURE A FAIR START -- THROUGH PROJECT HEAD START. \\\

OUR NEXT GOAL MIGHT BE CALLED "SEARCH AND RESCUE." WE WILL TARGET AMERICA'S MOST AT-RISK YOUTH, AND GET THEM THE HELP THEY NEED -- THE HELP THEY DESERVE. OUR 10-YEAR GOAL -- TO RAISE AMERICA'S HIGH SCHOOL GRADUATION RATE TO AT LEAST 90 PERCENT.

THIRD, IT'S TIME TO RE-ESTABLISH STANDARDS. BY THE NEW CENTURY, AMERICAN STUDENTS WILL LEAVE GRADES 4, 8, AND 12 HAVING DEMONSTRATED COMPETENCY OVER THE WORLD IN WHICH THEY LIVE -- THE WORLD OF MATH, ENGLISH, SCIENCE, HISTORY AND GEOGRAPHY.

AND WE'RE CALLING FOR A NEW RENAISSANCE IN SCIENCE AND MATH, TO MAKE AMERICA'S STUDENTS FIRST IN THE WORLD BY THE YEAR 2000.

NEXT -- READING. A COMPETITIVE AMERICA MUST BE A LITERATE AMERICA, WHERE EVERY MAN AND WOMAN POSSESSES THE KNOWLEDGE AND SKILLS NECESSARY TO SUCCEED IN A GLOBAL ECONOMY.

LAST -- AND MOST FUNDAMENTAL -- IN EVERY SCHOOL IN AMERICA, WE'VE GOT TO CREATE AN ENVIRONMENT CONDUCIVE TO LEARNING. THAT MEANS DISCIPLINED SCHOOLS. THAT MEANS DRUG-FREE SCHOOLS. \ \

THE SOLUTION TO CHAOS IN OUR CLASSROOMS IS NO MYSTERY. FRANKLIN HAD A WORD FOR IT. NOT BEN FRANKLIN -- ARETHA FRANKLIN. SHE CALLS IT: "R-E-S-P-E-C-T."
\\ KIDS NEED RESPECT FOR TEACHERS. RESPECT FOR LEARNING. RESPECT FOR THEMSELVES. \\

ALL SIX GOALS ARE IMPORTANT. AND LAMAR, I WAS THRILLED TO LEARN THAT TENNESSEE -- A MAJOR RESEARCH UNIVERSITY AND A PILLAR OF THE SCIENCE-RICH, OAK RIDGE CORRIDOR -- HAS ALREADY TAKEN THE LEAD IN RESPONDING TO OUR CHALLENGE TO USE SCIENCE AND TECHNOLOGY TO BOOST AMERICA'S COMPETITIVENESS. AND THANKS TO GOVERNOR McWHERTER, MARTIN MARIETTA, AND THE DEPARTMENT OF ENERGY -- YOU'LL HAVE A NEW SUMMER SCHOOL FOR MATH AND SCIENCE --AND A NEW ACADEMY FOR AMERICA'S TOP ELEMENTARY AND HIGH SCHOOL TEACHERS.

UNBELIEVABLY, IT WAS ALL PUT TOGETHER IN A WEEK. AND THE SPEED OF TENNESSEE'S RESPONSE PROVES WHAT WE'VE BEEN SAYING SINCE I FIRST SENT MY EDUCATIONAL EXCELLENCE PACKAGE TO CONGRESS LAST SPRING. THE TIME FOR STUDY IS PAST. THE TIME FOR ACTION IS NOW.

BUILDING AMERICA'S COMPETITIVE STRENGTH TODAY ALSO MEANS THAT WE NEED QUICK CONGRESSIONAL ACTION ON OUR OTHER PROPOSALS FOR INVESTING IN NEW CAPITAL -- INTELLECTUAL CAPITAL. THAT INCLUDES EVERYTHING FROM REFORMING PRODUCT LIABILITY LAWS TO DOUBLING THE BUDGET OF THE NATIONAL SCIENCE FOUNDATION.

IT MEANS A RECORD-HIGH INCREASE IN FUNDS FOR RESEARCH AND DEVELOPMENT -- R & D. NEW HELP FOR R & E -- RESEARCH AND EXPERIMENTATION -- BY MAKING THE R & E TAX CREDIT PERMANENT. AND FUNDS TO IMPROVE EDUCATION: THE EISENHOWER EDUCATION GRANTS FOR MATH AND SCIENCE WOULD GROW BY 70 PERCENT, TO \$230 MILLION.

IN SCIENCE AND TECHNOLOGY, THE UNITED STATES IS TODAY THE UNDISPUTED HEAVYWEIGHT CHAMPION OF THE WORLD. WE PRODUCE MORE SCHOLARLY WORKS, MORE BREAKTHROUGHS, MORE INTERNATIONAL PRIZES.

BUT LIKE ANY CHAMPION, WE CANNOT REST ON OUR REPUTATION. MORE THAN 30 YEARS AGO, DWIGHT EISENHOWER USED HIS STATE OF THE UNION SPEECH TO ADDRESS A SIMILAR CHALLENGE. "OUR REAL PROBLEM," SAID IKE, "IS NOT OUR STRENGTH TODAY. IT IS RATHER THE VITAL NECESSITY OF ACTION TODAY TO ENSURE OUR STRENGTH TOMORROW."

TODAY, I AM TAKING ACTION BY APPOINTING THE MEMBERS OF THE PRESIDENT'S COUNCIL OF ADVISORS ON SCIENCE AND TECHNOLOGY. INDEED, VICE PRESIDENT DAN QUAYLE -- WHO'S DOING SUCH AN OUTSTANDING JOB AS CHAIRMAN OF BOTH THE NATIONAL SPACE COUNCIL AND THE COMPETITIVENESS COUNCIL -- IS SWEARING IN THE MEMBERS OF THIS NEW COUNCIL THIS AFTERNOON. COMPRISED OF SOME OF THE BEST SCIENTIFIC MINDS IN THE COUNTRY, WE WILL MEET TOMORROW AT CAMP DAVID TO DISCUSS WAYS TO MAINTAIN U.S. SUPREMACY IN THESE FIELDS.

ONE WAY TO DO THAT IS BY CHALLENGING THE IMPOSSIBLE. AND THAT BRINGS TO MIND ANOTHER CHALLENGE THAT WILL PROBABLY MEAN MORE TO STRENGTHENING OUR EDUCATIONAL SYSTEM AND COMPETITIVE EDGE THAN ANY OTHER SINGLE ENDEAVOR. I'M TALKING ABOUT SPACE. FOR IN THE COMING CENTURY, FIRST IN SPACE WILL MEAN FIRST ON EARTH. AND AMERICA INTENDS TO STAY NUMBER ONE. \\\

WE NEED TO FIND WAYS TO DO THINGS FASTER AND MORE EFFICIENTLY IN SPACE. THAT'S WHY NASA AND OUR SPACE COUNCIL HAVE CALLED ON AMERICA'S GREAT UNIVERSITIES AND RESEARCH CENTERS TO PUT THEIR BRIGHTEST ENGINEERS AND SCIENTISTS TO WORK ON COMING UP WITH BOLD, INNOVATIVE IDEAS -- NEW TECHNOLOGIES FOR A NEW TOMORROW IN SPACE.

TENNESSEE HAS ALREADY MADE IMPORTANT CONTRIBUTIONS TO THE SPACE PROGRAM. RHEA SEDDON [[REE-A SEDD-UN]], ONE OF AMERICA'S FIRST WOMEN ASTRONAUTS, IS A GRADUATE OF U.T.'S COLLEGE OF MEDICINE. AND RESEARCHERS AT U.T.'S SPACE INSTITUTE IN TULLAHOMA ARE WORKING WITH NASA TO DEVELOP ADVANCED SPACE PROPULSION SYSTEMS FOR THE NEXT GENERATION OF MANNED AND UNMANNED MISSIONS.

IN THE NEW CENTURY -- YOUR CENTURY -- THOSE NEW SYSTEMS MAY HELP TAKE AMERICANS BACK TO THE MOON AND BEYOND. OUR GOAL: TO PLACE AMERICANS ON MARS -- AND TO DO IT WITHIN THE WORKING LIFETIMES OF SCIENTISTS AND ENGINEERS WHO WILL BE RECRUITED FOR THE EFFORT TODAY. AND JUST AS JEFFERSON SENT LEWIS AND CLARK TO OPEN THE CONTINENT, OUR COMMITMENT TO THE MOON/MARS INITIATIVE WILL OPEN THE UNIVERSE. IT'S THE OPPORTUNITY OF A LIFETIME -- AND OFFERS A LIFETIME OF OPPORTUNITY. \ \ \

YET, SOME WONDER IF AMERICA HAS LOST ITS COMPETITIVE EDGE, AND ASK IF WE MUST NOW LOOK OVERSEAS FOR THE ANSWER. THEY POINT TO LAST WEEK'S LAUNCH IN JAPAN -- A NEW SATELLITE SENT TO ORBIT THE MOON. THEY FORGET THAT 26 YEARS AGO TODAY -- LONG BEFORE MANY OF YOU WERE BORN -- AMERICA'S RANGER 6 LANDED ON THE MOON.

THE UNITED STATES IS THE "DEFENDING WORLD CHAMPION." BUT, WE HAVE TO DEFEND OUR TITLE DAY-BY-DAY, WEEK-BY-WEEK, YEAR-IN AND YEAR-OUT. THE TENNESSEE OF BOB NEYLAND [[NEE-LAND]] AND JOHNNY MAJORS, OF WADE HOUSTON AND PAT SUMMITT, KNOWS SOMETHING ABOUT DEFENDING ATHLETIC DYNASTIES. HERE IT'S DONE THE OLD-FASHIONED WAY, THE TENNESSEE WAY, THE AMERICAN WAY.

YOU CAN PLAY SMART. BUT THERE ARE NO SHORTCUTS. IT TAKES HARD WORK AND GRIT. IT DEMANDS THE CONSTANT RENEWAL OF NEW TALENT AND NEW IDEAS -- ALWAYS TEMPERED BY VETERAN COACHING. AND IT MEANS SWEATING HARDER, REACHING HIGHER, AND SEEING FARTHER THAN THE OTHER GUY.

IT'S NEVER EASY, KEEPING THAT NO. 1 RANKING. PAT SUMMITT SAID IT IN 1984, JUST BEFORE BRINGING THE U.S. WOMEN'S BASKETBALL TEAM TO AN OLYMPIC GOLD MEDAL. SHE SAID: "WE'RE EXPECTED TO WIN... THAT'S A GREATER CHALLENGE THAN WHEN YOU'RE EXPECTED TO FINISH SECOND."

PAT'S RIGHT. WE ARE GOING TO NEED AS NEVER BEFORE THE "CAN-DO" ATTITUDE THAT BROUGHT OUR ANCESTORS TO AMERICA -- AND THAT BROUGHT AMERICA TO GREATNESS. IN WORLD WAR I, WHEN THEY ASKED YOUR OWN SGT. YORK HOW HE CAPTURED 132 ENEMY PRISONERS AND 32 MACHINE GUNS ALL BY HIMSELF, HE ANSWERED: "I SURROUNDED 'EM."

THAT'S WHAT I'D EXPECT FROM A TENNESSEAN. AND THAT KIND OF SPIRIT IS GOING TO CARRY US INTO THE 21ST CENTURY AND BEYOND.

AND AS WE APPROACH THE CHALLENGES OF TOMORROW, IN
A WORLD INCREASINGLY HUNGRY FOR YESTERDAY'S VALUES, I
HOPE YOU'LL CONTINUE TO GIVE VOICE TO TENNESSEE'S
FRONTIER VIRTUES: HARD WORK. LOYALTY. LOVE OF FAITH,
FAMILY AND THE VOLUNTEER STATE.

WHEN WE HEAR AMERICA SINGING, IT IS OFTEN THE
SOUND OF TENNESSEE. THE BLUEGRASS FIDDLE OF THE
MOUNTAINS. THE GOSPEL AND COUNTRY SOUND OF NASHVILLE.
THE JAZZ, THE BLUES, OF MEMPHIS. IT IS THE STUFF OF
LEGEND, THE SPIRIT OF FAITH AND HOPE. AND WITH SPIRIT
LIKE THAT -- AMERICA'S GOING TO DO A TENNESSEE WALTZ,
ALL OVER THE COMPETITION. \\\

THANK YOU FOR YOUR WARM GREETING. GOD BLESS YOU.
GOD BLESS TENNESSEE. AND GOD BLESS THE U.S.A.

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THE WHITE HOUSE
WASHINGTON

February 1, 1990

INFORMATION

MEMORANDUM FOR THE PRESIDENT

THROUGH: CHRISS WINSTON *W*
FROM: EDWARD McNALLY *EM*
SUBJECT: UNIVERSITY OF TENNESSEE SPEECH

I. SUMMARY

Attached are draft remarks for tomorrow afternoon's speech, an address on education and competitiveness at the University of Tennessee in Knoxville.

II. DISCUSSION

At 3:05 p.m. on Friday, February 2, 1990, you are scheduled to arrive onstage in the Alumni Gymnasium at the University of Tennessee (U.T.) to address an audience of approximately 3,000 students, faculty and university officials.

Billed as a major follow-up to your State of the Union address, the speech (15 minutes, TelePrompter) elaborates on your proposals to keep America competitive in the 90's, incorporating many of the suggestions developed by Roger Porter for the State of the Union address. The speech focuses particular attention on your initiatives to boost education, science and math training, research and development, and space exploration.

During his introduction of you, U.T. President (and former Governor) Lamar Alexander will announce U.T.'s response to your State of the Union call to make America's students No. 1 in math and science by the Year 2000 -- and unveil a new summer school funded by U.T., Martin Marietta, and the U.S. Department of Energy. Your prepared text includes acknowledgements and praise of Governor Alexander's new program (please see page 4).

Two notes concerning the "jokes" on page 1: (1) On-campus parking at U.T. is a perennial problem. (2) "Smokey" is Tennessee's beloved mascot, a "blue tick coon hound" that appears at every game in the manner of Yale's bulldog, "Handsome Dan."

McNally/Simon
February 1, 1990
Draft Four (B:TENN)

PRESIDENTIAL REMARKS: UNIVERSITY OF TENNESSEE, KNOXVILLE
ALUMNI GYMNASIUM
FRIDAY, FEB. 2, 1990, 3:05 P.M.

Thank you, Lamar [[ALEXANDER]] and also Governor McWherter.
And I'm pleased to be here with my Education Secretary, Lauro Cavazos, and my Secretary of Energy Jim Watkins -- both are doing an outstanding job for America. And also Alvin Trivelpiece, Director of the Oak Ridge National Laboratory. Also here today, Congressmen Jimmy Quillen, John Duncan, Don Sundquist, Marilyn Lloyd and Jim Cooper. And Knoxville's Mayor, Victor Ashe.

Sorry we were a little late getting in. But you know how it is on this campus. **Even I can't find a parking place.** \\\

It's great to be back in Tennessee. I'm very proud of this state, and this University. And I hear some of you noticed the T-shirt I had on while jogging down in Texas in December -- the "Big Orange" colors of the Tennessee Volunteers. \\\

Back in Washington they debated which move took more guts -- invading Panama, or going to Texas wearing a Big Orange T-shirt.

I got the shirt in Washington when Pat Summitt came to the Rose Garden last April with Tennessee's Lady Volunteers -- the 1989 NCAA National Champions. \\\

And when they came to Washington the Lady Vols had only one request. Not to see the Oval Office. Not to see the Wright brothers plane. Not even Georgetown at night. **What they wanted to see was Millie's new puppies.** \\\

Of course we said yes. But now it's my turn. And as long

as I'm at U.T., it seems I ought to get to meet "SMOKEY." \\\

I am proud of Tennessee, and your great sports traditions. But the truth is, what makes this university so special says a lot about what makes America so special. It's not the winner's trophy at the end of the quest. It's the quest itself. And in Tennessee, as in America, that means the quest for excellence.

At U.T., the quest for excellence starts not on the basketball court or the football field but in the classroom. Maybe you heard that at the White House, I bragged as much about the Lady Vols' 14 years with a 100 percent graduation rate as I did about their basketball championship.

Earlier this week, I issued my first formal budget as President, a blueprint for the year ahead. And two days ago, I stood in the U.S. Capitol -- stood before the American people -- and reported to you on the State of the Union.

[[But don't worry if you missed the speech -- you're not going to hear the two words that strike terror in the hearts of every college student: \\ "Pop quiz!" \\\]]

At the heart of my address was a sense of confidence that America today is second to none -- and sense of commitment, a plan to keep America second to none in the years ahead.

The foundation for our plan -- the foundation for our future -- is anchored by a cornerstone we call "Educational Excellence."

Education is our most enduring legacy, vital to everything we are and can become. And my budget calls for record funding, reflecting this belief. But as I said Wednesday night, real

improvement in our schools is not simply a matter of spending more. It is a matter of asking more -- expecting more -- of our schools, our teachers, our kids -- and of ourselves.

You in Tennessee know that goals and high expectations work. Five years ago, Governor Alexander told Tennessee's eighth graders: "If you want to go to state universities -- you're going to have to take more math and science."

There was a good deal of grumbling at first. But today, almost all freshman are meeting those requirements.

As a result, admission scores are up. Retention rates are up. And best of all -- 41 percent more students are taking science and math in the high schools than were taking those subjects five years ago. You expected more. So you got more.

I believe what worked for Tennessee will work for America. And Wednesday night, I announced America's education goals -- goals developed with the Governors of all fifty states.

Part of the answer means getting back to basics. Recently one kid was asked if he knew what the "Three R's" were. He said, "Sure: Reading. 'Riting. And Remote Control." \\\

Well, just as we're re-doubling our efforts to boost education, so we've doubled the "Three R's" as well. We have six goals -- "Six R's" for education in the Nineties.

The first is Readiness. By the Year 2000, every child in America will start school ready to learn. And we've called for a record increase -- an extra half-billion dollars to ensure a fair start -- through project Head Start. \\\

Our next goal might be called "Search and Rescue." We will target America's most at-risk youth, and get them the help they need -- the help they deserve. Our 10-year goal -- to raise America's high school graduation rate to at least 90 percent.

Third, it's time to Re-establish standards. By the new century, American students will leave grades 4, 8, and 12 having demonstrated competency over the world in which they live -- the world of math, English, science, history and geography.

And we're calling for a new Renaissance in science and math, to make America's students first in the world by the Year 2000.

Next -- Reading. A competitive America must be a literate America, where every man and woman possesses the knowledge and skills necessary to succeed in a global economy.

Last -- and most fundamental -- in every school in America, we've got to create an environment conducive to learning. That means disciplined schools. That means drug-free schools. \\\

The solution to chaos in our classrooms is no mystery. Franklin had a word for it. Not Ben Franklin -- Aretha Franklin. She calls it: "R-E-S-P-E-C-T." \\\ Kids need respect for teachers. Respect for learning. Respect for themselves. \\\

All six goals are important. And Lamar, I was thrilled to learn that Tennessee -- a major research university and a pillar of the science-rich, Oak Ridge Corridor -- has already taken the lead in responding to our challenge to use science and technology to boost America's competitiveness. And thanks to Governor

McWherter, Martin Marietta, and the Department of Energy --

Lamar
alexander
615-974-2241

+ Reggy Dufour
Sec. of Energy's Office 586-7970

you'll have a new Summer School for Math and Science --and a new academy for America's top elementary and high school teachers.

Unbelievably, it was all put together in a week. And the speed of Tennessee's response proves what we've been saying since I first sent my Educational Excellence package to Congress last spring. The time for study is past. The time for action is now.

Building America's competitive strength today also means that we need quick Congressional action on our other proposals for investing in new capital -- intellectual capital. That includes everything from reforming product liability laws to doubling the budget of the National Science Foundation.

It means a record-high increase in funds for Research and Development -- R & D. New help for R & E -- Research and Experimentation -- by making the R & E Tax Credit permanent. And funds to improve education: The Eisenhower Education Grants for math and science would grow by 70 percent, to \$230 million.

In science and technology, the United States is today the undisputed heavyweight champion of the world. We produce more scholarly works, more breakthroughs, more international prizes.

But like any champion, we cannot rest on our reputation. More than 30 years ago, Dwight Eisenhower used his State of the Union speech to address a similar challenge. "Our real problem," said Ike, "is not our strength today. It is rather the vital necessity of action today to ensure our strength tomorrow."

Today, I am taking action by appointing the members of the

President's Council of Advisors on Science and Technology.

Indeed, Vice President Dan Quayle -- who's doing such an outstanding job as chairman of both the National Space Council and the Competitiveness Council -- is swearing in the members of this new council this afternoon. Comprised of some of the best scientific minds in the country, we will meet tomorrow at Camp David to discuss ways to maintain U.S. supremacy in these fields.

One way to do that is by challenging the impossible. And that brings to mind another challenge that will probably mean more to strengthening our educational system and competitive edge than any other single endeavor. I'm talking about space. For in the coming century, first in space will mean first on Earth. And America intends to stay Number One. \\\

We need to find ways to do things faster and more efficiently in space. That's why NASA and our Space Council have called on America's great universities and research centers to put their brightest engineers and scientists to work on coming up with bold, innovative ideas -- new technologies for a new tomorrow in space.

Tennessee has already made important contributions to the space program. Rhea Seddon [[REE-a SEDD-un]], one of America's first women astronauts, is a graduate of U.T.'s College of Medicine. And researchers at U.T.'s Space Institute in Tullahoma are working with NASA to develop advanced space propulsion systems for the next generation of manned and unmanned missions.

In the new century -- your century -- those new systems may help take Americans back to the Moon and beyond. Our goal: To place Americans on Mars -- and to do it within the working lifetimes of scientists and engineers who will be recruited for the effort today. And just as Jefferson sent Lewis and Clark to open the continent, our commitment to the Moon/Mars initiative will open the Universe. It's the opportunity of a lifetime -- and offers a lifetime of opportunity. \\\

Yet, some wonder if America has lost its competitive edge, and ask if we must now look overseas for the answer. They point to last week's launch in Japan -- a new satellite sent to orbit the Moon. They forget that 26 years ago today -- long before many of you were born -- America's Ranger 6 landed on the Moon.

The United States is the "defending world champion." But, we have to defend our title day-by-day, week-by-week, year-in and year-out. The Tennessee of Bob Neyland [[NEE-land]] and Johnny Majors, of Wade Houston and Pat Summitt, knows something about defending athletic dynasties. Here it's done the old-fashioned way, the Tennessee way, the American way.

You can play smart. But there are no shortcuts. It takes hard work and grit. It demands the constant renewal of new talent and new ideas -- always tempered by veteran coaching. And it means sweating harder, reaching higher, and seeing farther than the other guy.

It's never easy, keeping that No. 1 ranking. Pat Summitt said it in 1984, just before bringing the U.S. women's basketball

team to an Olympic Gold medal. She said: "We're expected to win... That's a greater challenge than when you're expected to finish second."

Pat's right. We are going to need as never before the "can-do" attitude that brought our ancestors to America -- and that brought America to greatness. In World War I, when they asked your own Sgt. York how he captured 132 enemy prisoners and 32 machine guns all by himself, he answered: "I surrounded 'em."

That's what I'd expect from a Tennessean. And that kind of spirit is going to carry us into the 21st Century and beyond.

And as we approach the challenges of tomorrow, in a world increasingly hungry for yesterday's values, I hope you'll continue to give voice to Tennessee's frontier virtues: Hard work. Loyalty. Love of faith, family and the Volunteer state.

When we hear America singing, it is often the sound of Tennessee. The bluegrass fiddling of the mountains. The gospel and country sound of Nashville. The jazz, the blues, of Memphis. It is the stuff of legend, the spirit of faith and hope. And with spirit like that -- America's going to do a Tennessee waltz, all over the competition. \\\

Thank you for your warm greeting. God bless you. God bless Tennessee. And God bless the U.S.A.

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McNally/Simon
January 31, 1990
Draft Three (B:TENN)

PRESIDENTIAL REMARKS: UNIVERSITY OF TENNESSEE, KNOXVILLE
ALUMNI GYMNASIUM
FRIDAY, FEB. 2, 1990, 3:05 P.M.

[[ACKNOWLEDGMENTS]]

Sorry we were a little late getting in. But you now how it
is on this campus. Even I can't find a parking place. \\\

*Last trip
1/14/88*
It's great to be back in Tennessee. I'm very proud of this
state, and this University. And I hear some of you noticed the
*Cameron
Alexander*
T-shirt I had on while jogging down in Texas in December -- the
"Big Orange" colors of the Tennessee Volunteers. \\\

Back in Washington they debated which move took more guts --
invading Panama, or going to Texas wearing a Big Orange T-shirt.

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lot about what makes America so special. It's not the winner's
trophy at the end of the quest. It's the quest itself. And in
Tennessee, as in America, that means the quest for excellence.

At U.T., the quest for excellence starts not on the basketball court or the football field but in the classroom.

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1/29/90 Earlier this week, I issued my first formal budget as President, a blueprint for the year ahead. And two days ago, I stood in the U.S. Capitol -- stood before the American people -- and reported to you on the State of the Union.

1/31/90 [[But don't worry if you missed the speech -- you're not going to hear the two words that strike terror in any college classroom: \\ "Pop quiz!" \\ \\]]

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The foundation for our plan -- the foundation for our future -- is anchored by a cornerstone we call "Educational Excellence."

Budget Fact Sheet
1-29-90 P. 5
S.O.T.U.
1-31-90
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Lamar
Alexander
You in Tennessee know that goals and high expectations work. Five years ago, Governor Alexander told Tennessee's eighth graders: "If you want to go to state universities -- you're

going to have to take more math and science."

There was a good deal of grumbling at first. But today, almost all freshman are meeting those requirements.

Luman
Alexander

615-
974-
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As a result, admission scores are up. Retention rates are up. And best of all -- 41 percent more students are taking science and math in the high schools than were taking those subjects five years ago. You expected more. So you got more.

S.O.T.V.
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I believe what worked for Tennessee will work for America. And Wednesday night, I announced America's education goals -- goals developed with the Governors of all fifty states.

Part of the answer means getting back to basics. Recently one kid was asked if he knew what the "Three R's" were. He said, "Sure: Reading. 'Riting. And Remote Control." ///

Well, just as we're re-doubling our efforts to boost education, so we've doubled the "Three R's" as well. We have six goals -- "Six R's" for education in the Nineties.

S.O.T.V.
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The first is Readiness. By the Year 2000, every child in America will start school ready to learn. And we've called for a record increase -- an extra half-billion dollars to ensure a fair start -- through project Head Start. ///

Budget
fact sheet
1-29-90
p. 5

Our next goal might be called "Search and Rescue." We will target America's most at-risk youth, and get them the help they need -- the help they deserve. Our 10-year goal -- to raise America's high school graduation rate to at least 90 percent.

S.O.T.V.
1-31-90

Third, it's time to Re-establish standards. By the new century, American students will leave grades 4, 8, and 12 having

demonstrated competency over the world in which they live -- the world of math, English, science, history and geography.

S.O.T.U.
1-31-90

And we're calling for a new Renaissance in science and math, to make America's students first in the world by the Year 2000.

S.O.T.U.
1-31-90

Next -- Reading. A competitive America must be a literate America, where every man and woman possesses the knowledge and skills necessary to succeed in a global economy.

S.O.T.U.
1-31-90

Last -- and most fundamental -- in every school in America, we've got to create an environment conducive to learning. That means disciplined schools. That means drug-free schools. //

The solution to chaos in our classrooms is no mystery.

Franklin had a word for it. Not Ben Franklin -- Aretha Franklin.

She calls it: "R-E-S-P-E-C-T." \\\ Kids need respect for teachers. Respect for learning. Respect for themselves. //

Lamar
Alexander
615-974
2241

All six goals are important. And Lamar, I was thrilled to learn that Tennessee -- a major research university and a pillar of the science-rich, Oak Ridge Corridor -- has already taken the lead in responding to our challenge to use science and technology to boost America's competitiveness. Your new Summer School for Math and Science -- and its academy for America's top elementary and high school teachers -- is sure to make a difference.

Unbelievably, it was all put together in a week. And the speed of Tennessee's response proves what we've been saying since I first sent my Educational Excellence package to Congress last spring. The time for study is past. The time for action is now.

Building America's competitive strength today also means

that we need quick Congressional action on our other proposals for investing in new capital -- intellectual capital. That includes everything from reforming product liability laws to doubling the budget of the National Science Foundation.

FY 91 Budget p. 67-9

It means a record-high increase in funds for Research and Development -- R & D. New help for R & E -- Research and Experimentation -- by making the R & E Tax Credit permanent. And funds to improve math and science education: The Eisenhower Education Grants would ~~nearly double~~ *grow by 70%* to \$230 million.

91 Budget Chart on p. 72

91 Budget p. 91

91 Budget p. 88

In science and technology, the United States is today the undisputed heavyweight champion of the world. We produce more scholarly works, more breakthroughs, more international prizes.

1/9/58 see file

But like any champion, we cannot rest on our reputation. More than 30 years ago, Dwight Eisenhower used his State of the Union speech to address a similar challenge. "Our real problem," said Ike, "is not our strength today. It is rather the vital necessity of action today to ensure our strength tomorrow."

John Gardner + OSTP X 5101

Today, I am taking action by announcing the formation of the President's Council of Advisors on Science and Technology. Comprised of some of the best scientific minds in the country, we will meet tomorrow at Camp David to discuss ways to maintain U.S. supremacy in these fields.

One way to do that is by challenging the impossible. And that brings to mind another challenge that will probably mean more to strengthening our educational system and competitive edge than any other single endeavor. I'm talking about space. For in

the coming century, first in space will mean first on Earth. And America intends to stay Number One. \\\

Tennessee has already made important contributions to the space program. Rhea Seddon, one of America's first women astronauts, is a graduate of U.T.'s College of Medicine. And researchers at U.T.'s Space Institute in Tullahoma are working with NASA to develop advanced space propulsion systems for the next generation of manned and unmanned missions.

NASA
453-8536
Dick Roberts
UTSI
615-455-0631
x 319

In the new century -- your century -- those new systems may help take Americans back to the Moon and beyond. Our goal: To place Americans on Mars -- and to do it within the working lifetimes of scientists and engineers who will be recruited for the effort today. And just as Jefferson sent Lewis and Clark to open the continent, our commitment to the Moon/Mars initiative will open the Universe. It's the opportunity of a lifetime -- and offers a lifetime of opportunity. \\\

Yet, some wonder if America has lost its competitive edge, and ask if we must now look overseas for the answer. They point to last week's launch in Japan -- a new satellite sent to orbit the Moon. They forget that 26 years ago today -- long before many of you were born -- America's Ranger 6 landed on the Moon.

launched
1-25-90
ABC, CBS

see file

The United States is the "defending world champion." But, we have to defend our title day-by-day, week-by-week, year-in and year-out. The Tennessee of Bob Neyland and Johnny Majors, of Wade Houston and Pat Summitt, knows something about defending athletic dynasties. Here it's done the old-fashioned way, the

Bud Ford
UT Sports Information
615-974-1212

Tennessee way, the American way.

You can play smart. But there are no shortcuts. It takes hard work and grit. It demands the constant renewal of new talent and new ideas -- always tempered by veteran coaching. And it means sweating harder, reaching higher, and seeing farther than the other guy.

UPI
7-5-84
Reuters
8-8-84
see
file

It's never easy, keeping that No. 1 ranking. Pat Summitt said it in 1984, just before bringing the U.S. women's basketball team to ~~another~~ ^{an} Olympic Gold medal. She said: "We're expected to win ~~now~~. That's a greater challenge than when you're expected to finish second."

Pat's right. We are going to need as never before the "can-do" attitude that brought our ancestors to America -- and that brought America to greatness. When they asked your own Sgt. York how he captured 132 enemy prisoners and 32 machine guns all by himself, he answered: "I surrounded 'em." \\\

Webster's
Am.
Biographies
see
file

That's what I'd expect from a Tennessean. And that kind of spirit is going to carry us into the 21st Century and beyond.

And as we approach the challenges of tomorrow, in a world increasingly hungry for yesterday's values, I hope you'll continue to give voice to Tennessee's frontier virtues: Hard work. Loyalty. Love of faith, family and the Volunteer state.

When we hear America singing, it is often the sound of Tennessee. The bluegrass fiddling of the mountains. The gospel and country sound of Nashville. The jazz, the blues, of Memphis. It is the stuff of legend, the spirit of faith and hope. And

with spirit like that -- America's going to do a Tennessee waltz,
all over the competition. \\\

Thank you for your warm greeting. God bless you. God bless
Tennessee. And God bless the U.S.A.

#

hamer

McNally/Simon
January 31, 1990
Draft Two (B:TENN)

PRESIDENTIAL REMARKS: UNIVERSITY OF TENNESSEE, KNOXVILLE
ALUMNI GYMNASIUM
FRIDAY, FEB. 2, 1990, 3:05 P.M.

[[ACKNOWLEDGMENTS]]

Sorry we were a little late getting in. But you now how it is on this campus. **Even I can't find a parking place.** \\\

It's great to be back in Tennessee. I'm very proud of this state, and this University. And I hear some of you noticed the T-shirt I had on while jogging down in Texas in December -- the **"Big Orange" colors of the Tennessee Volunteers.** \\\

Back in Washington they debated which move took more guts -- invading Panama, or going to Texas wearing a Big Orange T-shirt.

I got the shirt in Washington when Lamar Alexander and Pat Summitt came to the Rose Garden last April with Tennessee's Lady Volunteers -- the 1989 NCAA National Champions.\\\

And when they came to Washington the Lady Vols had only one request. Not to see the Oval Office. Not to see the Wright brothers plane. Not even Georgetown at night. **What they wanted to see was Millie's new puppies.** \\\

Of course we said yes. But now it's my turn. And as long as I'm at U.T., it seems I ought to get to meet **"SMOKEY."** \\\

I am proud of Tennessee, and your great sports traditions. But the truth is, what makes this university so special says a lot about what makes America so special. It's not the winner's trophy at the end of the quest. It's the quest itself. And in Tennessee, as in America, that means the quest for excellence.

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Well, just as we're re-doubling our efforts to boost education, so we've doubled the "Three R's" as well. We have six goals -- "Six R's" for education in the Nineties.

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Civilizations define themselves by challenging the impossible. And that brings to mind another challenge that will probably mean more to strengthening our educational system and competitive edge than any other single endeavor. I'm talking about space. For in the coming century, **first in space will mean first on Earth.** ^{remember me,} **And America intends to stay first on Earth.** \\\

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astronauts, is a graduate of U.T.'s College of Medicine. And researchers at the Space Institute here are working with NASA to develop advanced space propulsion systems for the next generation of manned and unmanned missions.

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regarding *Pat's next*
 We need the "can-do" attitude that brought our ancestors to America -- and that brought America to greatness. When they asked your own Sgt. York how he captured 132 enemy prisoners and 32 machine guns all by himself, he answered: "I surrounded 'em."

Spirit
 That's what I'd expect from a Tennessean. And that kind of ~~spirit~~ is going to carry us into the 21st Century and beyond.

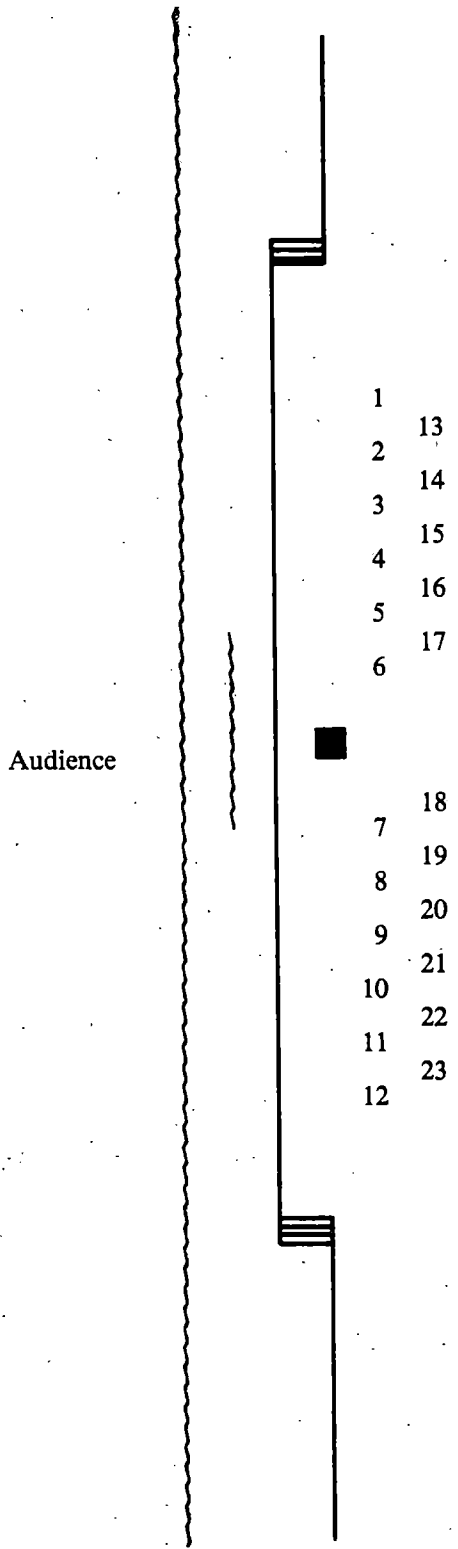
And as we approach the challenges of tomorrow, in a world increasingly hungry for yesterday's values, I hope you'll continue to give voice to Tennessee's frontier virtues -- hard work, loyalty, love of place.

When we hear America singing, it is often the sound of Tennessee. The bluegrass fiddling of the mountains. The gospel and country sound of Nashville. The jazz ^{and} the blues, of Memphis, ~~and the Mississippi lowlands.~~ It is the stuff of legend, the spirit of soul and faith. And with spirit like that -- America's going to do a Tennessee waltz, all over the competition. \\\

Thank you for your warm greeting. God bless you. God bless Tennessee. And God bless the U.S.A.

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TAB
KNOXVILLE, TENNESSEE
 University of Tennessee
 Alumni Auditorium
 Stage/Dais Seating Diagram
 Friday, February 2, 1990



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- 1. Congressman Don Sundquist
- 2. Congressman James Quillen
- 3. Congresswoman Marilyn Lloyd
- 4. Congressman Jim Cooper
- 5. John J. Quinn - Chancellor, University of Tennessee
- 6. Ned Ray McWherter - Governor of Tennessee
- 7. Lamar Alexander - President of the University of Tennessee
- 8. THE PRESIDENT
- 9. Alvin C. Trivelpiece - Director, Oakridge Nat'l Laboratory
- 10. Lauro Cavazos - Secretary of Education
- 11. Admiral Watkins - Secretary of Energy
- 12. Congressman John Duncan
- 13. Dwight Kessel - Knox County Executive
- 14. Clyde Hopkins - President, Martin-Marietta Energy Systems
- 15. Thomas C. Hood - Faculty Senate President
- 16. Betsy Quinn - Wife of John J. Quinn
- 17. Norman R. Augustine - Chairman of Martin-Marietta
- 18. Honey Alexander - Wife of Lamar Alexander
- 19. USSS
- 20. Victor Ashe - Mayor, Knoxville, Tennessee
- 21. Heide Elizabeth Hagler - Tennessee Scholar
- 22. John G. Claybrooks, Jr. - President, Student Government
- 23. Mrs. Connie Lester - President, Graduate Student Association

4TH STORY of Level 1 printed in FULL format.

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AUGUST 8, 1984, WEDNESDAY, PM CYCLE

LENGTH: 422 words

HEADLINE: U.S. WOMEN WIN OLYMPIC BASKETBALL GOLD

BYLINE: BY LARRY FINE

DATELINE: LOS ANGELES, AUG 7

KEYWORD: OLYMPICS

BODY:

THE UNITED STATES WOMEN'S BASKETBALL TEAM WON THEIR FIRST OLYMPIC GOLD MEDAL BY OVERWHELMING SOUTH KOREA 85-55 (42-27) TODAY.

IT WAS THE UNBEATEN AMERICANS' SECOND VICTORY OVER SOUTH KOREA - THEY WON THE FIRST MATCH BY 37 POINTS - AND THEIR SIXTH WIN OVERALL IN THE TOURNAMENT.

SOUTH KOREA, REPLACEMENTS FOR THE SOVIET UNION WHO ARE BOYCOTTING THE LOS ANGELES GAMES, TOOK HOME THE SILVER MEDAL. THEY FINISHED THE SIX-TEAM COMPETITION WITH A 4-2 RECORD.

AT THE FINAL BUZZER, THE TWO TEAMS GATHERED IN THE CENTRE OF THE COURT AND LIFTED THEIR COACHES HIGH IN THE AIR TO THE CHEERS OF THE 11,000 CROWD AT THE FORUM ARENA.

CHINA EARLIER TOOK THE BRONZE MEDAL BY BEATING CANADA 63-57 (37-29).

THE AMERICAN TEAM, SILVER MEDALLISTS AT THE 1976 MONTREAL GAMES, WERE INSPIRED BY THE COURAGEOUS ALL-ROUND PLAY OF FORWARD CHERYL MILLER, WHO SCORED 16 POINTS WHILE GRABBING 11 REBOUNDS AND DEALING FIVE ASSISTS.

JANICE LAWRENCE SCORED 14 POINTS AND TOOK DOWN 12 REBOUNDS AS THE STRONG U.S. FRONTCOURT DOMINATED THE SMALLER SOUTH KOREANS.

CHOI AEI-YOUNG LED THE SOUTH KOREAN ATTACK WITH 20 POINTS, WHILE FELLOW-GUARD KIM HWA-SOON, THE LEADING TOURNAMENT SCORER, SCORED 15.

CENTRE PARK CHAN-SOOK, SECOND SCORER OVERALL, WAS HELD TO JUST THREE POINTS.

THE TEAMS WERE LEVEL 12-12 AFTER SIX MINUTES OF THE GAME. BUT THE AMERICANS PUT ON AN EIGHT-POINT BURST TO LEAD 20-12.

SOUTH KOREA BATTLED FIERCELY BUT WERE SIMPLY OUTCLASSSED. AN AMERICAN 14-POINT STREAK FOR 62-38 EARLY IN THE SECOND HALF PUT THE GAME OUT OF THEIR REACH.

RIGHT NOW I'M AT A LOSS FOR WORDS,' AN ECSTATIC MILLER SAID AFTERWARDS. 'RIGHT NOW I'VE ACHIEVED MY ULTIMATE GOAL.'

(c) 1984 Reuters North European Service, AUGUST 8, 1984

HER FRONTCOURT MATE LAWRENCE ADDED: 'I'M THRILLED WITH THIS WIN. IT MAKES ALL THE HARD WORK WORTHWHILE. I'D LIKE TO TRY TO DO THIS A SECOND TIME IN 1988.

'I'M GOING TO ITALY TO PLAY FOR ZULU (A CLUB TEAM) AND I HOPE I CAN STAY IN SHAPE FOR SEOUL.'

U.S. COACH PAT SUMMITT, WHO PLAYED ON THE 1976 TEAM, SAID SHE WAS THRILLED WITH THE VICTORY. 'THIS DEFINITELY HAS TO BE THE HIGHLIGHT IN COMPARING IT TO THE SILVER MEDAL.'

KIM HWA-SOON PAID TRIBUTE TO THE WINNERS. 'THE U.S. TEAM IS STRONG, BIG AND FAST. THEY PLAY BOTH GOOD DEFENCE AND OFFENCE AT THE SAME TIME. WE GAVE IT ALL WE'VE GOT BUT THE U.S. TEAM IS JUST MUCH BETTER.'

CHINA'S BRONZE WAS THEIR FIRST OLYMPIC BASKETBALL MEDAL, THANKS LARGELY TO THE STRENGTH OF SONG XIAOBO, WHO SCORED 16 POINTS. CANADA, WHOSE SECOND-HALF RALLY FELL SHORT, WERE LED BY BEV SMITH WITH 13 POINTS AND DEBBIE HUBAND, 12.

10TH STORY of Level 1 printed in FULL format.

Proprietary to the United Press International 1984

July 5, 1984, Thursday, AM cycle

SECTION: Sports News

LENGTH: 333 words

DATELINE: KNOXVILLE, Tenn.

KEYWORD: Oly-Summitt

BODY:

Coach Pat Summitt says the U.S. Olympic women's basketball team is America's best ever but the Soviet boycott of the Summer Games puts greater pressure on the squad.

Summitt said Thursday her team has been lifted from underdog to favorite because of the boycott by the Soviet Union, which has dominated the women's game for decades.

USA: "As soon as I heard about the boycott I started thinking that now there would be even greater pressure on us," she said. "We're expected to win now. That's a greater challenge than going out when you're expected to finish second."

Summitt, coach of Tennessee's Lady Vols, said she hoped to avenge American losses to the Russians.

"I think, looking back, it was a great disappointment," she said. "But life goes on. The Olympics go on.

"I don't think you're going to look at that gold medal and see engraved on it that the Soviets weren't here or that Hungary didn't participate. You're going to see a medal those players can cherish for the rest of their lives," Summitt said.

Summitt, who played on the first U.S. Olympics women's basketball team in 1976 and served as assistant coach in 1980, said the 1984 version is the best yet.

"For one thing, we have a greater number of athletes," she said. "I also think this team is better because it has experience. Having four players who were on the team in '80 really gives us the maturity and leadership that I think are vital to our success," she said.

Summitt defended her practice of picking role players and cutting players with greater individual talent.

"I've learned in coaching that it's not necessarily athletic ability that is vital to success," she said. "When you take 12 superstars who have always shot the ball, it's sometimes difficult to convince a player that she's going to be a rebounder or a passer or going to play defense.

his hibernation. If he sees his shadow, it indicates another six weeks of winter are forthcoming. (Especially significant in Punxsutawney, Pa., where *the* groundhog is said to reside.)

Religious Calendar

Feasts

Presentation of the Lord or

Candlemas or

Christ's Presentation or

Dia de la Candelaria or

Holiday of St. Simeon or

Purification of the Blessed Virgin Mary or

The Wives' Feast Celebration of the presentation of the Child Jesus to St. Simeon, and the Purification of Mary. Observed by Roman Catholics, Anglicans, and various Protestant churches.

The Saints

St. Adalbold of Ostrevant, martyr. [d. 652]

The Martyrs of Ebsdorf. [d. 880]

St. Joan de Lestonnac, widow and founder of the Religious of Notre Dame of Bordeaux. [d. 1640]

The Beatified

Blessed Maria Catherine Kasper. [beatified 1979]

Feb. 2

- | | |
|--|---|
| <p>1801 First parliament of the United Kingdom of England and Ireland meets.</p> <p>1848 Treaty of Guadalupe Hidalgo ends the war with Mexico and provides for the cession of Texas, New Mexico, and California to the U.S. (Mexican War).</p> <p>1872 The Netherlands cedes the Gold Coast of Africa to Great Britain.</p> <p>1882 The Knights of Columbus are organized at New Haven, Connecticut.</p> <p>1884 Basutoland (Lesotho) becomes a British Crown Colony.</p> <p>1901 Army Nurse Corps is organized as a branch of the U.S. Army.</p> <p>1916 British test armored motor cars, called <i>tanks</i>, for the first time (World War I).</p> <p>1920 Estonia gains independence from Russia with the signing of the Treaty of Dorpat.</p> <p>1922 <i>Ulysses</i> by James Joyce is published in Paris.</p> <p>1932 U.S. Reconstruction Finance Corporation is established as a depression-relief measure.</p> <p>1943 Last German troops surrender in Stalingrad pocket, completing Russian victory at Stalingrad (World War II).</p> <p>1959 Virginia schools are desegregated, following Virginia State Supreme Court decision.</p> <p>1960 Sit-in demonstrations begin in Greensboro, N.C., to protest storekeepers' refusals to serve blacks.</p> | <p>1964 U.S. lunar probe Ranger 6 effects lunar landing and begins transmission of the first close-up photographs of the moon.</p> <p>1967 General Anastasio Somoza Debayle, candidate of the ruling Nationalist Liberal Party, is elected president of Nicaragua.</p> <p>American Basketball Association, the second major American league, is formed.</p> <p>1971 Major-General Idi Amin declares himself absolute ruler in Uganda and maintains control until his government is overthrown in 1979.</p> <p>1973 Philippine President Ferdinand E. Marcos offers amnesty to Communists and other "subversives" but not to their leaders.</p> <p>Pope Paul VI nominates thirty new cardinals, bringing membership of the College of Cardinals to 145.</p> <p>1974 A new Cultural Revolution begins in the Peoples' Republic of China, including an anti-Confucius campaign.</p> <p>1982 Photographs transmitted by U.S. space probe Voyager 2 reveal four to six previously undiscovered moons orbiting Saturn.</p> |
|--|---|

Jan. 9

Dwight D. Eisenhower, 1958

¶ 2

Soviets, these achievements show a rate of progress that speaks for itself. Only a brief time back, we were spending at the rate of only about one million dollars a year on long range ballistic missiles. In 1957 we spent more than one billion dollars on the Atlas, Titan, Thor, Jupiter, and Polaris programs alone.

But I repeat, gratifying though this rate of progress is, we must still do more!

Our real problem, then, is not our strength today; it is rather the vital necessity of action today to ensure our strength tomorrow.

What I have just said applies to our strength as a single country. But we are not alone. I have returned from the recent NATO meeting with renewed conviction that, because we are a part of a world-wide community of free and peaceful nations, our own security is immeasurably increased.

By contrast, the Soviet Union has surrounded itself with captive and sullen nations. Like a crack in the crust of an uneasily sleeping volcano, the Hungarian uprising revealed the depth and intensity of the patriotic longing for liberty that still burns within these countries.

The world thinks of us as a country which is strong, but which will never start a war. The world also thinks of us as a land which has never enslaved anyone and which is animated by humane ideals. This friendship, based on common ideals, is one of our greatest sources of strength.

It cements into a cohesive security arrangement the aggregate of the spiritual, military and economic strength of all those nations which, with us, are allied by treaties and agreements.

Up to this point, I have talked solely about our military strength to deter a possible future war.

I now want to talk about the strength we need to win a different kind of war—one that has already been launched against us.

It is the massive economic offensive that has been mounted by the communist imperialists against free nations.

The communist imperialist regimes have for some time been largely frustrated in their attempts at expansion based directly on force. As a

Park, Florida, which from 1942 were known as the Yerkes Laboratories, and it was there that he acquired a worldwide reputation as one of the leading authorities on the great apes, especially on the chimpanzee. He published many influential books and papers; among the books were *The Dancing Mouse; a Study in Animal Behavior*, 1907; *Introduction to Psychology*, 1911; *The Mental Life of Monkeys and Apes*, 1916; *Almost Human*, 1925; *The Great Apes: A Study of Anthropoid Life*, 1929, written with his wife, Ada W. Yerkes; and *Chimpanzees: A Laboratory Colony*, 1943. He also served as a consultant to army intelligence during World War II. The recipient of many awards and honors for his work with great apes, he died in New Haven, Connecticut, on February 3, 1956.

Yoelson, Asa, see *Jolson, Al*

York, Alvin Cullum (1887-1964), soldier. Born in Pall Mall, Fentress County, Tennessee, on December 13, 1887, York had little formal education, dropping out of school in the third grade to work in a blacksmith shop. In 1911 he underwent a religious conversion at a revival meeting and when the United States entered World War I he declared himself a conscientious objector. His petition for exemption from the draft was denied, however, and he was inducted into the army and served overseas in the 82nd Infantry Division. While taking part in the battle of the Argonne Forest on October 8, 1918, York demonstrated outstanding heroism by leading an attack on a German machine-gun nest. He and his men killed 25 of the enemy, and, acting almost alone, he captured 132 prisoners and 35 machine guns. When asked how he had done this all by himself, he replied: "I surrounded 'em." The act made him the major popular hero of the war. On November 1, 1918, shortly before the armistice, he was promoted to sergeant and later was awarded the Congressional Medal of Honor and the French Croix de Guerre. Altogether he received some 50 other decorations and became one of the most celebrated heroes of the war. After the war, however, he refused to capitalize on his fame; he returned to Tennessee to live on a farm granted him by the state. In 1928 he published his autobiography and in 1940 allowed the movie *Sergeant York*, starring Gary Cooper, to be made. Cooper won an Academy Award in 1941 for his performance. York himself lived very modestly, giving away the bulk of the proceeds from his book and the movie to a foundation organized to support an industrial school and a Bible school in Tennessee. He died in Nashville, Tennessee, on December 2, 1964.

Young, Brigham (1801-1877), religious leader. Born in Whitingham, Vermont, on June 1, 1801, Young was raised in western New York State and received only a few months of formal schooling in the towns where his poverty-stricken family drifted. He grew up to be a farmer, carpenter, painter, and glazier, and in 1829 he settled in

Mendon, Monroe County, New York. Joseph Smith's *Book of Mormon* was published the following year in a nearby town, and Young was baptized into Smith's new Church of Jesus Christ of Latter-Day Saints (the "Mormon Church") on April 14, 1832. After several successful missionary tours for the church in the fall of 1833, he "gathered" with the Saints in Kirtland, Ohio, and joined in the march of Zion's Camp to Jackson County, Missouri, a fruitless effort to help dispossessed Mormons regain their lands. For his faith and works, he was named one of the Twelve Apostles when Smith organized this body in 1835. The failure of the Mormon bank along with the constant hostility of non-Mormons made it necessary for Young, like Smith and other Mormon leaders, to flee first, in 1838, to northwestern Missouri and by the following year, out of the state entirely. By that time two older apostles had died or left the church and Young became senior member of the quorum. A chief figure in the successful founding of Nauvoo, Illinois, he then went to England, where he preached for a year and established a mission that was to contribute many British converts to the church in the United States during the next half-century. Returning home in 1841, he lived quietly among the Saints in Nauvoo until the assassination of Smith in June 1844. At the time of the assassination he was absent in the East, but he quickly returned to Nauvoo. Young succeeded in his bid to head the church and early in 1846 the pressure of unfriendly neighbors forced him to lead the majority of the Saints out of Illinois. They spent the summer at the Missouri River and in 1847 he conducted a pioneer company to the West, where the site of Salt Lake City was chosen as a settling place for the Saints. He led the emigration of the whole church to Utah in 1848, and Salt Lake City became the base of a colonizing endeavor in which the Saints sought out irrigable land and settled every feasible locality, including areas in what are now the four surrounding states as well as in California. As the supreme authority in the cooperative Mormon theocracy, Young supervised the most minute details of the settlements, and the agricultural communities enjoyed phenomenal growth and prosperity and converts continued to arrive. When Congress changed the Mormons' provisional state of Deseret to the Territory of Utah in 1850, he continued as governor. He was appointed to a second term in 1854, but grinding friction between the Mormons and the federal judiciary over the Mormon practice of polygamy and their economic power finally led President James Buchanan to replace Young as governor in 1857. An army force under Gen. Albert S. Johnston was sent in 1857 to establish the primacy of federal rule in Utah, and Young passively resisted the incoming troops until the spring of 1858. His statesmanship avoided a real break with the United States, however. Although he never again held political office, he effectively ruled the people of Utah as president of the Mormon church. As a result of his foresight and firm command, Mormons held nearly all the

choice and irrigable land in Utah. Salt Lake and much land in surrounding areas. They early established a net service operations that made them rich. Having accepted the doctrine of plural marriage, he took 27 wives—some as ceremonial rather than as wives. Only one of whom survived him, alone on his death in Salt Lake City.

Young, Chic, see *Young, Muriel*

Young, Clarence, see *Stratton*

Young, Cy (1867-1955), baseball player. Born in Gilmore, Tuscarawas County, Ohio, on October 18, 1867, Denton True Young became a professional baseball player for a Canton team and was later a member of the National League. In October of that year he demonstrated his pitching stamina by pitching and winning a double-header. He pitched for the Boston Red Sox in 1898, then successively for the Boston Red Sox, Cleveland Indians (American League), and the Boston Braves (National League) from 1899 to 1912. He retired after the 1912 season. He retired at the age of forty-five, too overwhelmed by the pressure of the game, and went into farming. He played in 906 games, a record for a pitcher in the major leagues, and became common; but his record of 3,777 innings, and 7377 hits, is likely never to be broken. He pitched especially extraordinary; he never won 500 games. He pitched 3 no-hit games, including his first "perfect" game—in which he pitched 27 batters in 9 innings, no errors, on May 5, 1904. He pitched 10 games in each of the major leagues, and enjoyed seasons with 20 or more wins. He won over 30 games in 1892, his best season. He was inducted into the National Baseball Hall of Fame in Newcomerstown, Tuscarawas County, Ohio, on November 4, 1955. After his death, the Cy Young Award was established for the best pitcher in each major league.

Young, Denton True, see *Young, Cy*

Young, Murat Bernard (1903-1987), cartoonist. Born in Chicago, Illinois, on August 1, 1903, Young grew up there and in 1921 attended art schools in Chicago, New York, and New York before becoming a cartoonist for the paper Enterprise Association in Chicago. He switched to the Bell Syndicate in 1926 and joined the King Features Syndicate in 1927. He remained during the rest of his life in the industry. From 1926 to 1928 he drew a daily comic strip called *Dora*. In 1930 he originated the character of the flapper, a young woman about a jazz-age flapper who

For Bob Simon from Lamar Alexander 1/30

The United States is the world leader in science and technology--more literature, more breakthroughs, more prizes; it is an advantage we must maintain if we are to keep our standard of living;

Our research universities are unique; we are the only country where most of the basic research is done in our universities; we are unique in this; every other country would love to duplicate our research universities but none has

We are proud of the progress the University of Tennessee has made, especially during the last few years. It is one of the major research universities in terms of the federal funding it attracts. Its Centers of Excellence and Chairs of Excellence, the Distinguished Scientist Program with Oak Ridge Laboratory all are great models.

I like the SCIENCE ALLIANCE between the University of Tennessee, one of the nation's major research universities, and the Oak Ridge National Laboratory, the federal government's largest non-weapons lab.

**This afternoon I saw an experiment involving one of the distinguished scientists, a unique program involving distinguished scientists who teach at UT and work at Oak Ridge.

**This indeed is a science-rich area of America. The Oak Ridge Corridor has great promise.

**Distinguished leadership of the area: John Quinn, head of UT, Knoxville who has a prominent physicist and Dean of the Faculty at Brown; Al Trivelpiece, ORNL head, who was executive director of the American Association for the Advancement of Science; (Marvin Rynyon, TVA head)

Acknowledge the Academy for Science and Math

- **University's contribution
- **Governor's, state's contribution
- **Martin Marietta, Norman Augustine
- **Watkins
- **Oak Ridge Corridor as a symbol of

Wearing sweatshirt for jogging

Admiral Watkins' visit to Oak Ridge earlier in the year pushing science and math connections between Oak Ridge and UT

Howard Baker is UT's most distinguished alumnus, lives in Knoxville, will probably be present

Knoxville is TVA headquarters

**For Bob Simon from Lamar Alexander, 1/30
Lamar's Fax No in Knoxville 615 974-3753**

**Welcome Mr. President, to the University
of Tennessee.**

**On behalf of Chancellor John Quinn and the
faculty and students, all the university
community-- we couldn't be more pleased that
you have accepted our invitation.**

**You're in the foothills of the Great Smoky
Mountains. Appalachia. Most people know that.**

**But you are also right in the center of of
one of the great science-rich areas of America.
Not everyone knows that.**

**The University of Tennessee is one of
America's major research universities.**

**Just down the road is the Oak Ridge National
Laboratory. We call the Oak Ridge research
lab our "sister campus".**

**Add up the PHDs and scientists and
engineers at UT, Oak Ridge and TVA and you**

have about as many as live and work along the Oak Ridge Corridor as live and work in the Research Triangle of North Carolina where you were earlier today.

We heard your challenge Mr. President-- that the USA be No. 1 in math and science skills by the year 2000.

We're ready to take up that challenge.

We know that better skills mean better jobs, that we Americans absolutely cannot keep our standard of living in today's world competition unless we have better skills--all of us--children as well as those already working today.

And we know our science and technology skills depend upon learning mathematics and sciences.

So , Mr. President, here is our response:

** The University of Tennessee will establish immediately the Summer School of

of the South for Math and Science. Its mission will be to accelerate teaching and learning of math and science, to lead our region in meeting your challenge.

**** As part of the new Summer School, we will create an Academy for Teachers of Science and Mathematics. Each summer 200 of the finest high school and elementary teachers from our region will come to the University of Tennessee campus for four weeks as students**

--to study how to advance the teaching and learning of math and science in our region.

****The University is proud to have some important partners in this mission.**

First, Governor McWherter announced this morning that the State of Tennessee will contribute \$1 million over four years to establish the Academy.

Second, Mr. Norman Augustine, the Chairman of Martin Marietta Corporation, announced that his corporation will give \$1 million over four years to create the Martin

Martin Marietta Fellowships, one for every science and math teacher selected to attend the summer academy. Mr. Augustine said he wanted the academy to be one of the your "education points of light".

Third, Secretary of Energy Admiral Watkins has announced that the federal government will contribute \$1 million over four years to one of your favorite projects, Mr. President. The Department of Energy will provide \$1 million in funding for 20 fellowships each year for scientists and engineers who want to become teachers, go back into the classroom to help our region meet your challenge. They will enroll in the **alternate certification program at the University of Tennessee**, go immediately in the classroom, and have their teaching certificate within 15 months.

There is much more Mr. President. The state will continue as part of the Summer School of the South its highly successful Governor's School for Math and Science Students. In many programs we will be hooking

hooking up the "sister campuses", UT and Oak Ridge, as tightly as we can to help students and teachers.

This is a true American partnership, Mr. President: a state research university and a federal research laboratory, the state government, a major corporation, a federal agency all working together toward the goal of the President of the United States.

All put together in one week.

If we'd had two weeks, no telling what we might have been able to do!

We know that goals and high expectations work, Mr. President.

Five years ago Tennessee said to its eighth graders, "If you want to go to state universities you're going to have to take more math and science." There was a good deal of grumbling.

But today almost all freshmen are now meeting those requirements.

As a result, admission scores are up.

Retention rates are up.

And best of all, 41 per cent more students are taking science and advanced math in the high schools than were taking those subjects five years ago. The enrollment in our high schools hasn't gone up. But the number taking science and math has.

We expected more. So we got more.

We believe the same thing will happen with your Goal 2000.

Because you're expecting more from America, you'll get more from us.

We want you to succeed as Education President, Mr. President, because if you don't succeed, we don't succeed.

**Ladies and Gentlemen, THE PRESIDENT OF
THE UNITED STATES.**

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release

January 31, 1990

STATE OF THE UNION ADDRESS

The U.S. Capitol
Washington, D.C.

9:05 P.M. EST

THE PRESIDENT: Thank you very much. Mr. President, Mr. Speaker, members of the United States Congress: I return as a former President of the Senate, and a former member of this great House. And now, as President, it is my privilege to report to you on the State of the Union.

Tonight, I come not to speak about the "state of the government" -- not to detail every new initiative we plan for the coming year, nor to describe every line in the budget. I'm here to speak to you and to the American people about the state of the Union -- about our world -- the changes we've seen, the challenges we face. And what that means for America.

There are singular moments in history -- dates that divide all that goes before from all that comes after. And many of us in this chamber have lived much of our lives in a world whose fundamental features were defined in 1945. And the events of that year decreed the shape of nations. The pace of progress. Freedom or oppression for millions of people around the world.

Nineteen forty-five provided the common frame of reference -- the compass points of the post-war era we've relied upon to understand ourselves. And that was our world, until now. The events of the year just ended, the revolution of '89, have been a chain reaction -- changes so striking that it marks the beginning of a new era in the world's affairs.

Think back -- think back just 12 short months ago to the world we knew as 1989 began.

One year -- one year ago, the people of Panama lived in fear, under the thumb of a dictator. Today, democracy is restored -- Panama is free. (Applause.)

Operation "Just Cause" has achieved its objective. The number of military personnel in Panama is now very close to what it was before the operation began. And tonight, I am announcing that well before the end of February, the additional numbers of American troops -- the brave men and women of our Armed Forces who made this mission a success -- will be back home. (Applause.)

A year ago in Poland, Lech Walesa declared that he was ready to open a dialogue with the communist rulers of that country. And today, with the future of a free Poland in their own hands, members of Solidarity lead the Polish government. (Applause.)

A year ago, freedom's playwright, Vaclav Havel, languished as a prisoner in Prague. And today, it's Vaclav Havel -- President of Czechoslovakia. (Applause.)

And one year ago, Erich Honecker, of East Germany claimed history as his guide. And he predicted the Berlin Wall would last another hundred years. And today -- less than one year later -- it's the Wall that's history. (Applause.)

MORE

Remarkable events -- events that fulfill the long-held hopes of the American people -- events that validate the long-standing goals of American policy -- a policy based on a single, shining principle: the cause of freedom. (Applause.)

America -- not just the nation, but an idea, alive in the minds of people everywhere. As this new world takes shape, America stands at the center of a widening circle of freedom -- today, tomorrow, and into the next century.

Our nation is the enduring dream of every immigrant who ever set foot on these shores -- and the millions still struggling to be free. This nation -- this idea called America -- was and always will be a new world. Our new world.

At a workers' rally, in a place called Branik on the outskirts of Prague -- the idea called America is alive. A worker, dressed in grimy overalls, rises to speak at the factory gates. He begins his speech to his fellow citizens with these words -- words of a distant revolution:

"We hold these truths to be self-evident. That all men are created equal; that they are endowed by their Creator with certain unalienable rights, and that among these are life, liberty and the pursuit of happiness."

It's no secret that, here at home, freedom's door opened long ago. The cornerstones of this free society have already been set in place: Democracy. Competition. Opportunity. Private investment. Stewardship. And, of course, leadership.

And our challenge today is to take this democratic system of ours -- a system second to none -- and make it better.

A better America, where there's a job for everyone who wants one.

Where women working outside the home can be confident their children are in safe and loving care -- and where government works to expand child care alternatives for parents. (Applause.)

Where we reconcile the needs of a clean environment and a strong economy.

Where "Made in the USA" is recognized around the world as the symbol of quality and progress.

Where every one of us enjoys the same opportunities to live, to work, and to contribute to society. And where, for the first time, the American mainstream includes all of our disabled citizens. (Applause.)

Where everyone has a roof over his head and where the homeless get the help they need to live in dignity.

Where our schools challenge and support our kids and our teachers -- and where all of them; make the grade. (Applause.)

Where every street, every city, every school and every child is drug-free. (Applause.)

And finally, where no American is forgotten. Our hearts go out to our hostages -- our hostages who are ceaselessly on our minds and in our efforts.

That's part of the future we want to see -- the future we can make for ourselves. But dreams alone won't get us there. We need to extend our horizon -- commit to the long view. And our mission for the future starts today.

In the tough competitive markets around the world,

America faces the great challenges and great opportunities. And we know that we can succeed in the global economic arena of the '90's, but to meet that challenge, we must make some fundamental changes -- some crucial investment in ourselves.

Yes, we are going to invest in America. This administration is determined to encourage the creation of capital -- capital of all kinds. Physical capital: everything from our farms and factories, to our workshops and production lines; all that is needed to produce and deliver quality goods and quality services. (Applause.) Intellectual capital: the source of ideas that spark tomorrow's products. And, of course, our human capital: the talented work force that we'll need to compete in the global market.

Let me tell you. If we ignore human capital, if we lose the spirit of American ingenuity -- the spirit that is the hallmark of the American worker -- that would be bad. The American worker is the most productive worker in the world.

We need to save more. We need to expand the pool of capital for new investments that need more jobs and more growth. And that's the idea behind a new initiative I call the Family Savings Plan, which I will send to Congress tomorrow.

We need to cut the tax on capital gains -- (applause) -- encourage risktakers -- especially those in our small businesses to take those steps that translate into economic reward, jobs, and a better life for all of us.

We'll do what it takes to invest in America's future. The budget commitment is there. The money is there. It's there for research and development -- R&D -- a record high. It's there for our housing initiative -- HOPE, to help everyone from first-time homebuyers to the homeless. (Applause.) The money's there to keep our kids drug-free: 70 percent more than when I took office in 1989. It's there for space exploration and it's there for education -- another record high. (Applause.)

And one more thing: Last fall at the education summit, the governors and I agreed to look for ways to help make sure that our kids are ready to learn -- the very first day they walk into the classroom. And I've made good on that commitment by proposing a record increase in funds -- an extra half-a-billion dollars -- for something near and dear to all of us -- Head Start. (Applause.)

Education is the one investment that means more for our future because it means the most for our children. Real improvement in our schools is not simply a matter of spending more. It's a matter of asking more -- expecting more -- of our schools, our teachers, of our kids, of our parents and ourselves. And that's why tonight, I am announcing America's education goals -- goals developed with enormous cooperation from the nation's governors. And if I might, I'd like to say I'm very pleased that Governor Gardner and Governor Clinton, Governor Branstad, Governor Campbell, all of whom were very key in these discussions, these deliberations, are with us here tonight. (Applause.)

By the year 2000, every child must start school ready to learn. The United States must increase the high school graduation rate to no less than 90 percent. (Applause.)

And we are going to make sure our schools' diplomas mean something. In critical subjects -- at the 4th, 8th and 12th grades -- we must assess our students' performance. (Applause.)

By the year 2000, U.S. students must be first in the world in math and science achievement. (Applause.)

Every American adult must be a skilled, literate worker and citizen. (Applause.)

Every school must offer the kind of disciplined

environment that makes it possible for our kids to learn. And every school in America must be drug-free. (Applause.)

Ambitious aims? Of course. Easy to do? Far from it. But the future's at stake. The nation will not accept anything less than excellence in education.

These investments will keep America competitive. And I know this about the American people: We welcome competition. We'll match our ingenuity, our energy, our experience and technology, our spirit and enterprise against anyone. But let the competition be free; but let it also be fair. America is ready. (Applause.)

Since we really mean it and since we're serious about being ready to meet that challenge, we're getting our own house in order. We have made real progress. Seven years ago, the federal deficit was six percent of our Gross National Product -- six percent. In the new budget I sent up two days ago, the deficit is down to one percent of Gross National Product.

That budget brings federal spending under control. It meets the Gramm-Rudman target. It brings that deficit down further and balances the budget by 1993 with no new taxes. (Applause.)

And let me tell you, there's still more than enough federal spending. For most of us, \$1.2 trillion is still a lot of money.

And once the budget is balanced, we can operate the way every family must when it has bills to pay. We won't leave it to our children and our grandchildren. Once it's balanced, we will start paying off the national debt. (Applause.)

And there's something more we owe the generations of the future: stewardship, the safekeeping of America's precious environmental inheritance.

It's just one sign of how serious we are: we will elevate the Environmental Protection Agency to Cabinet rank. (Applause.) Not more bureaucracy, not more red tape, but the certainty that here at home and especially in our dealings with other nations, environmental issues have the status they deserve.

This year's budget provides over \$2 billion in new spending to protect our environment, with over \$1 billion for global change research. And a new initiative I call "America the Beautiful" to expand our national parks and wildlife preserves that improve recreational facilities on public lands.

And something else: something that will help keep this country clean, from our forestland to the inner cities, and keep America beautiful for generations to come, the money to plant a billion trees a year. (Applause.)

And tonight, let me say again to all the members of the Congress: the American people did not send us here to bicker. There is work to do, and they sent us here to get it done. And once again, in the spirit of cooperation, I offer my hand to all of you. Let's work together to do the will of the people: clean air; child care; the Educational Excellence Act; crime and drugs. It's time to act. The farm bill, transportation policy, product liability reform, enterprise zones -- it's time to act together. (Applause.)

And there's one thing I hope we will be able to agree on. It's about our commitments. I'm talking about Social Security. To every American out there on Social Security, to every American supporting that system today and to everyone counting on it when they retire; we made a promise to you, and we are going to keep it. (Applause.)

We rescued the system in 1983 and it's sound again -- bipartisan arrangement. Our budget fully funds today's benefits, and

it assures that future benefits will be funded as well. The last thing we need to do is mess around with Social Security. (Applause.)

There's one more problem we need to address. We must give careful consideration to the recommendations of the health care studies underway now. That's why tonight, I'm asking Dr. Sullivan -- Lou Sullivan -- Secretary of Health and Human Services, to lead a Domestic Policy Council review of recommendations on the quality, accessibility and cost of our nation's health care system. I am committed to bring the staggering costs of health care under control. (Applause.)

The "state of the government", does indeed depend on many of us in this very chamber. But the state of the Union depends on all Americans. We must maintain the democratic decency that makes a nation out of millions of individuals. I've been appalled at the recent mail bombings across this country. Every one of us must confront and condemn racism, antisemitism, bigotry and hate. Not next week, not tomorrow, but right now -- every single one of us. (Applause.)

The state of the Union depends on whether we help our neighbor -- claim the problems of our community as our own. We've got to step forward when there's trouble -- lend a hand, be what I call a point of light to a stranger in need. We've got to take the time after a busy day to sit down and read with our kids. Help them with their homework. Pass along the values we learned as children. That's how we sustain the state of the Union. Every effort is important. It all adds up -- it's doing the things that give democracy meaning. It all adds up to who we are and who we will be.

Let me say, that so long as we remember the American idea -- so long as we live up to the American ideal -- the state of the Union will remain sound and strong.

And to those who worry that we've lost our way -- well, I want you to listen to parts of a letter written by James Markwell -- Private First Class James Markwell, a 20-year old Army medic of the 1st Battalion, 75th Rangers. It's dated December 18th -- the night before our Armed Forces went into action in Panama. It's a letter servicemen write -- and hope will never be sent. And sadly, Private Markwell's mother did receive this letter. She passed it along to me out there in Cincinnati.

And here is some of what he wrote: "I've never been afraid of death, but I know he is waiting at the corner. I've been trained to kill and to save, and so has everyone else. I am frightened what lays beyond the fog, and yet, do not mourn for me. Revel in the life that I have died to give you. But most of all, don't forget the Army was my choice. Something that I wanted to do.

"Remember I joined the Army to serve my country and insure that you are free to do what you want and live your lives freely."

Let me add that Private Markwell was among the first to see battle in Panama, and one of the first to fall.

But he knew what he believed in. He carried the idea we call America in his heart.

I began tonight speaking about the changes we've seen this past year. There is a new world of challenges and opportunities before us. And there's a need for leadership that only America can provide.

Nearly 40 years ago, in his last address to the Congress, President Harry Truman predicted such a time would come. He said: "As our world grows stronger, more united, more attractive to men on both sides of the Iron Curtain, then inevitably there will come a time of change within the communist world."

Today, that change is taking place.

For more than 40 years, America and its allies held communism in check, and ensured that democracy would continue to exist. And today, with communism crumbling, our aim must be to ensure democracy's advance. To take the lead in forging peace and freedom's best hope -- a great and growing commonwealth of free nations.

And to the Congress and to all Americans, I say it is time to acclaim a new consensus at home and abroad -- a common vision of the peaceful world we want to see.

Here in our own hemisphere, it is time for all the peoples of the Americas -- North and South -- to live in freedom. (Applause.)

In the Far East and Africa, it's time for the full flowering of free governments and free markets that have served as the engine of progress.

It's time to offer our hand to the emerging democracies of Eastern Europe. So that continent -- for too long a continent divided -- can see a future whole and free.

It's time to build on our new relationship with the Soviet Union -- (applause) -- to endorse and encourage a peaceful process of internal change toward democracy and economic opportunity.

We are in a period of great transition, great hope, and yet great uncertainty. We recognize that the Soviet military threat in Europe is diminishing, but we see little change in Soviet strategic modernization. Therefore, we must sustain our own strategic offense modernization and the Strategic Defense Initiative. (Applause.)

But the time is right to move forward on a conventional arms control agreement to move us to more appropriate levels of military forces in Europe -- a coherent defense program that ensures the U.S. will continue to be a catalyst for peaceful change in Europe. And I've consulted with leaders of NATO. In fact, I spoke by phone with President Gorbachev just today.

I agree with our European allies that an American military presence in Europe is essential -- and that it should not be tied solely to the Soviet military presence in Eastern Europe.

But our troop levels can still be lower. And so tonight, I am announcing a major new step -- for a further reduction in U.S. and Soviet manpower in Central and Eastern Europe to 195,000 on each side. (Applause.)

This number -- this level reflects the advice of our senior military advisors. It's designed to protect American and European interests and sustain NATO's defense strategy. A swift conclusion to our arms control talks -- conventional, chemical and strategic -- must now be our goal. And that time has come.

Still, we must recognize an unfortunate fact: In many regions of the world tonight, the reality is conflict -- not peace. Enduring animosities and opposing interests remain. And thus, the cause of peace must be served by an America strong enough -- and sure enough -- to defend our interests and our ideals. It's this American idea that for the past four decades helped inspire this revolution of '89.

Here at home -- and in the world -- there's history in the making -- history to be made. Six months ago, early in this season of change, I stood at the gates of the Gdansk Shipyard in Poland at the monument to the fallen workers of Solidarity. It's a monument of simple majesty. Three tall crosses rise up from the stones. And atop each cross, an anchor -- an ancient symbol of hope.

MORE

The anchor in our world today is freedom. Holding us steady in times of change -- a symbol of hope to all the world. And freedom is at the very heart of the idea that is America.

Giving life to that idea depends on every one of us. Our anchor has always been faith and family.

In the last few days of this past momentous year, our family was blessed once more -- celebrating the joy of life when a little boy became our 12th grandchild. When I held the little guy for the first time, the troubles at home and abroad seemed manageable -- and totally in perspective. (Applause.)

Now, I know you're probably thinking: well, that's just a grandfather talking. Well, maybe you're right. But I've met a lot of children this past year across this country, as all of you have. Everywhere from the Far East to Eastern Europe. And all kids are unique, and yet all kids are alike. The budding young environmentalists I met this month, who joined me in exploring the Florida Everglades. The little leaguers I played catch with in Poland -- ready to go from Warsaw to the World Series. And even the kids who are ill or alone -- and God bless those boarder babies, born addicted to drugs and AIDS and coping with problems no child should have to face. But you know, when it comes to hope and the future, every kid is the same. Full of dreams; ready to take on the world. All special, because they are the very future of freedom. And to them belongs this new world I've been speaking about.

And so tonight, I'm going to ask something of every one of you. Now, let me start with my generation -- with the grandparents out there. You are our living link to the past. Tell your grandchildren the story of struggles waged at home and abroad, of sacrifices freely made for freedom's sake. And tell them your own story as well, because every American has a story to tell.

And parents: your children look to you for direction and guidance. Tell them of faith and family. Tell them we are One Nation under God. Teach them that of all the many gifts they can receive, liberty is their most precious legacy. And of all the gifts they can give, the greatest -- the greatest is helping others.

And to the children and young people out there tonight: with you rests our hope -- all that America will mean in the years and decades ahead. Fix your vision on a new century -- your century. On dreams we cannot see. On the destiny that is yours and yours alone.

And finally, let all Americans -- all of us together here in this chamber -- the symbolic center of democracy -- affirm our allegiance to this idea we call America. And let us remember that the State of the Union depends on each and every one of us.

God bless all of you. And may God bless this great nation, the United States of America. (Applause.)

END

9:40 P.M. EST

THE WHITE HOUSE
Office of the Press Secretary

For Immediate Release

January 29, 1990

PRESIDENT BUSH'S 1991 BUDGET

FACT SHEET

The President submitted the *Budget of the United States Government, Fiscal Year 1991* to Congress today. The following is a summary of selected highlights. Parenthetical notes refer to pages in the *Budget* at which further discussion and detail are provided.

The President's budget meets the legally required G-R-H deficit targets of \$64 billion for fiscal year 1991 and zero for fiscal year 1993.

The FY 1991 budget is presented in relation to five themes:

- I. Investing in the Future
- II. Advancing States as Laboratories
- III. Reforming Mandatory Programs
- IV. Acknowledging Inherited Claims
- V. Managing for Integrity and Efficiency

I. INVESTING IN THE FUTURE (page 23)

A. INCREASING SAVING, INVESTMENT, AND PRODUCTIVITY (page 25)

1. *Balance the Federal budget by 1993*, as required by the G-R-H law. This should increase saving and investment and reduce the need for U.S. foreign borrowing. (pages 3, 46)
2. *Protect Social Security integrity and reduce the national debt after 1993*. The Administration is proposing legislation to assure that the intended build-up in Social Security reserves is *not* used to mask the non-Social Security deficit. This would have several favorable effects: national saving and investment should rise; real interest rates should be lower; and U.S. competitiveness should be strengthened. (pages 10, 46, 267)
3. *Reduce tax rates on capital gains* for long-term investments by providing a permanent, sliding scale exclusion. This proposal promotes long-term investment to increase economic growth; helps U.S. business compete in an increasingly competitive global environment; produces increased receipts for the Treasury; and, most importantly, increases jobs and the quality of life for all Americans. (pages 17, 47, A-51)
4. *Create Family Savings Accounts and Modify IRAs*. The Family Savings Account (FSA) is proposed by the Administration to give individuals and families an

extra incentive to save for the future. The proposal would exempt from income tax the interest income on certain nondeductible contributions to FSAs that are held for seven years. In addition, the Administration proposes to modify current individual retirement account rules to allow a waiver of the 10 percent excise tax penalty for early withdrawals of up to \$10,000 if the withdrawn funds are used for first-time home purchases. (pages 17, 47, A-51)

B. EXPANDING THE HUMAN FRONTIER—SPACE AND BIOTECHNOLOGY, AND THE SUPERCONDUCTING SUPER COLLIDER (page 49)

SPACE

The 1991 budget proposes to allocate a record \$15.8 billion in budget authority for space activities, including \$15.2 billion for NASA. The NASA budget will increase by \$2.9 billion, or 24 percent. (page 49)

1. *Building Space Transportation Infrastructure:* The budget proposes funding for Space Shuttle production and operations of \$4.2 billion, an increase of \$752 million, or 22 percent, over 1990. This will support the 10 shuttle flights planned for 1991, one more than planned for 1990, plus the continued acquisition of long-lead time spare parts, support for shuttle payloads and shuttle improvements such as the advanced solid rocket motor. (page 52)
2. *Expanding the Space Frontier through Manned Exploration:* (page 53)
 - *Space Station Freedom:* For 1991, the budget proposes a total of \$2.6 billion in budget authority for the continued development of Space Station Freedom. This is an increase of \$699 million or 36 percent above 1990. It will provide for the critical transition from design to actual fabrication of the first long-lead time hardware elements.
 - *The mission back to the Moon and to Mars:* The President has lifted the sights of the space program with his call for the establishment of a manned presence on the moon and a manned mission to Mars. The budget reflects the Administration's commitment to this mission by proposing \$1.27 billion in budget authority, an increase of \$408 million, or 47 percent above 1990 levels, for space exploration activities.
3. *Using Space to Increase Scientific Understanding:* The budget proposes to increase funding for space science missions for planetary exploration, astronomy and Earth observations over the next decade by \$593 million in budget authority or 22 percent, over 1990 levels. The budget will also allow for the continuation of the development of important projects such as the Advanced X-ray Astrophysics Facility, planned for launch in 1995, and the Comet Rendezvous/Asteroid Flyby and Cassini mission to Saturn. The budget will provide support for thousands of researchers and students to acquire and analyze data from previously launched missions. (page 56)
 - *Understanding and observing global change:* The budget proposes over \$1 billion in budget authority to extend U.S. leadership in understanding global environmental change. This represents a 57 percent increase over 1990. NASA is a major participant in the U.S. Global Change Research Program (USGCRP) through its Mission to Planet Earth. NASA will develop and launch

a number of satellites and instruments, including TOPEX (to analyze surface ocean circulation) and the Upper Atmosphere Research Satellite (UARS) (to analyze the chemistry of the upper atmosphere.) The 1991 budget proposes a major new program, the Earth Observing System (EOS) which is a series of space-based instruments and platforms, developed by the U.S., the Europeans and the Japanese.

4. *Developing the Commercial Potential of Space:* The 1991 budget will continue the Administration's strong support for the commercialization of space. NASA will allocate \$229 million in budget authority to continue to procure all of its expendable launch vehicle services from private launch service providers. In addition, the budget will provide \$101 million for NASA's Office of Commercial Programs, including new funding for a special initiative through its Centers for the Commercial Development of Space (CCDS) to provide flight opportunities for innovative experiments in microgravity. (page 58)
5. *Other Space Activities:* The 1991 budget proposes \$258 million in budget authority for the Department of Commerce space satellite programs. This includes \$174 million for the development and launch of replacement satellites for the polar-orbiting and geostationary weather satellite systems and \$47 million to operate those systems; and \$37 million for the launch of Landsat 6. (page 58)

BIOTECHNOLOGY (page 59)

Advances in biotechnology can help improve the availability and quality of the food supply; prevent, identify, and cure disease; and reduce the hazards of industrial waste.

The budget proposes \$3.6 billion in budget authority, an increase of \$213 million over 1990, for biotechnology research and development.

To spur biotechnology R&D, the budget supports *speeding up regulatory review* where appropriate. The Food and Drug Administration would establish a system of user fees for the review of drugs and medical devices, including products that use techniques developed through biotechnology. By substantially increasing the resources available to the FDA, user fees will enable that agency to speed its review of biotechnology products and, in turn, allow firms to bring their products to the marketplace sooner.

SUPERCONDUCTING SUPER COLLIDER (page 64)

The Superconducting Super Collider will help scientists explore aspects of matter that are unreachable using any existing facility, and it holds the potential for new breakthroughs in science, technology and education.

The 1991 budget provides \$318 million in budget authority for the SSC, an increase of \$100 million over the 1990 level. The budget supports work to complete the design, development, and testing of the magnets that will propel proton beams around the tunnel. R&D on other SSC technical systems will continue.

C. ENHANCING RESEARCH AND DEVELOPMENT (page 67)

The budget proposes to allocate almost \$71 billion in budget authority for research and development in 1991. This is an increase of \$4.5 billion, or 7 percent, over 1990 enacted levels. Civilian R&D will increase by 12 percent while Defense-related R&D will increase by 4 percent. Within this total, \$12 billion will be allocated for basic research, an increase of \$1 billion, or about 8 percent over FY 1990.

1. *Doubling of the National Science Foundation*: A 14 percent increase will continue progress toward doubling the NSF budget by 1993. (page 74)
2. *Global Change*: An increase of 57 percent for the U.S. Global Change Research Program (USGCRP), to a total of over \$1 billion. This program continues the U.S. world leadership role in climate change research. (page 75)
3. *Agricultural Research Initiative*: The budget proposes \$100 million in budget authority as the first step of a new agricultural research program, designed to enhance production efficiency, food safety, and environmental quality. (page 77)
4. *Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome*: An overall increase of 18 percent in all aspects of the Federal response to HIV/AIDS: research, prevention, treatment, and income support. (page 78)
5. *R&D for Advanced Technology*: \$192 million in budget authority, an increase of 28 percent for robotics R&D, and continued support for R&D on high performance computing, semiconductors, superconductivity and advanced imaging. (page 84)
6. *Magnetic Levitation Transportation*: An increase of nearly 400 percent to \$10 million in budget authority to explore this potentially important transportation technology. (page 84)
7. *Science and Engineering Education*: The budget proposes over \$1 billion in budget authority, an increase of 26 percent above 1990 in direct spending, for science and engineering education activities in five agencies. In addition, the budget provides research grants to universities in direct support fellowships and other forms of education support. (page 87)
8. *R&E Tax Credit*: The budget proposes to make the Research and Experimentation Tax Credit permanent. (page 91)
9. *R&D by Transnational Companies*: The budget proposes to make permanent the rules for allocation of R&D expenditures by transnational companies. (page 91)

D. INVESTING IN HUMAN CAPITAL (page 93)

EDUCATION (page 93)

The total 1991 budget requests for the Department of Education are the highest ever: \$24.6 billion in budget authority. Included is \$19.7 billion in budget authority for discretionary programs, \$1.2 billion more than Congress provided in 1990.

1. *Preparing Children to Learn:* (page 99)

- a. *Head Start:* increase by \$500 million in budget authority, to a record high total of \$1.9 billion. This 36 percent increase over the 1990 level would enable Head Start to enroll up to 70 percent of the eligible poor four year olds. (page 100)
- b. *Even Start:* double funds to \$48 million in budget authority, allowing significantly increased participation in this program designed to provide basic education services in low-income areas to parents together with their children, aged one through seven. (page 101)
- c. *Handicapped Infants:* \$83 million for the Education Department to develop and expand systems to find, and coordinate services for handicapped infants and their families. (page 101)
- d. *Handicapped Children:* \$258 million in budget authority under the Preschool State Grant program to pay for part of the excess cost of education and related services for handicapped children aged three to five. (page 102)

2. *Targeting Resources for Those Most in Need:* (page 102)

- a. *Elementary and Secondary Education:* increase the largest program for remedial education services for the disadvantaged—Chapter 1 Local Education Agency and Concentration Grants—to its highest level ever: \$4.96 billion in budget authority, an increase of \$366 million, 8 percent over 1990. (page 102)
- b. *Educational Excellence Act:* \$401 million in budget authority. This proposed legislation would give incentives to schools to improve educational achievement, expand the use of magnet schools, reward excellent teachers and students, promote the hiring of persons with proven subject matter knowledge and management abilities to be teachers and principals, increase the endowment funds of Historically Black Colleges and Universities, and provide special funding for the school districts with the worst drug abuse problems. (page 103)
- c. *Math and Science:* \$230 million in budget authority for the Dwight D. Eisenhower Mathematics and Science Education programs, a 70 percent increase over what Congress provided in 1990. These programs provide funds to States to improve the knowledge and teaching abilities of mathematics and science teachers. (page 104)
- d. *Literacy:* \$239 million in budget authority for the Adult Education programs of the Department of Education, an increase of more than 25 percent over what Congress provided in 1990. These programs include an Adult Literacy

Clearinghouse at the Department of Education. (In addition, funding is proposed to be doubled from \$3 million to \$6 million in 1991 for the VISTA—Volunteer in Service to America—Literary Corps of the ACTION agency.) (page 104)

- e. *Historically Black Colleges and Universities*: \$95 million in budget authority to support the operations of historically black colleges and universities and graduate institutions. An additional \$15 million is provided for matching endowment grants for these institutions, triple the amount provided in 1990. (page 104)
3. *Education Research and Statistics*: The budget provides for an increase of \$34.5 million in budget authority for primary research and statistics activities of the Education Department. This includes a 50 percent increase for statistics, from \$40 million in 1990 to \$60 million in 1991. Among the most important new research investments proposed are: (page 98)
- a. \$5 million for new research on dropout prevention. (page 99)
 - b. \$22 million for support for a network of national research and development centers conducting research on educational technology, reading, effective teaching for the disadvantaged, school leadership, and other subjects. (page 99)
 - c. \$7 million for the Educational Resources Information Center. (page 99)
 - d. \$20 million for the regional education laboratories to support local school improvements efforts. (page 99)

JOB TRAINING

4. *Improving Job Training Opportunities*: (page 104)
- a. *The Job Training Partnership Act*: The budget seeks to refine the Federal Government's role in the Job Training Partnership Act (JTPA) by: revising eligibility criteria to ensure that the most disadvantaged receive services; providing more intensive and comprehensive services to participants; and improving coordination among Federal, State and local human resource programs. (page 106)
 - b. *Youth Opportunities Unlimited*: The Administration has proposed a new, multi-year challenge grant program entitled Youth Opportunities Unlimited (YOU). Targeting high poverty inner cities and rural areas, this program is designed to have community-wide impact, serving as a model in developing a local coordinated human resource policy for at-risk youth. (page 108)
 - c. *Job Opportunities and Basic Skills*: This program was enacted as part of the Family Support Act of 1988. The 1991 budget includes \$1 billion for this program. (page 108)

ENHANCING PARENTAL CHOICE IN CHILD CARE (page 194)

Respecting the many ways that American families care for their children, the President has based his child care policy upon parental choice. The budget repropose the two tax credit initiatives for child care that were advanced last year: (1) a new refundable Child

Tax Credit for low-income working families of up to \$1,000 for each child younger than age four, and (2) refundability of the current Child and Dependent Care Tax Credit.

E. ENDING THE SCOURGE OF DRUGS (page 111)

The 1991 Federal drug control budget totals \$10.6 billion in budget authority. This budget will provide \$9.7 billion in outlays, \$2.8 billion more in outlays than last year—a 41 percent increase.

1. *Attacking the Drug Market at the Source and on the Street:* (page 112)

a. *At the source:* (page 112)

- an increase of \$175 million in budget authority in economic assistance for the Andean nations to complement military and law enforcement programs begun in 1990. If the Andean nations show demonstrable progress in 1990, the total assistance package will reach \$440 million in 1991.
- A \$15 million in budget authority increase is proposed for drug control programs in countries that now produce marijuana and heroin, or serve as trans-shipment points for those substances.
- \$35 million in budget authority is requested for domestic marijuana eradication.
- \$2.4 billion in budget authority proposed for air, land, and maritime interdiction operations would provide obstacles to drug smugglers, including seizure of illegal shipments, and can ultimately reduce the availability of drugs in the U.S.

b. *On the street:* (page 113)

- \$330 million in budget authority for the 13 regional Organized Crime Drug Enforcement Task Forces. This represents a 54 percent increase over 1990.
- \$50 million in budget authority, a \$25 million increase over 1990, proposed to be targeted on high intensity drug trafficking areas.
- An estimated \$238 million in budget authority from seizures will be shared with State and local law enforcement agencies—their fair share of Federal seizures of drug dealers' assets.
- \$700 million in budget authority for the Drug Enforcement Administration (DEA). The \$151 million increase over 1990 represents one of the largest annual increases in the history of the agency.
- Within the DEA budget request is a 30 percent increase for State and local task forces to \$42 million in budget authority in 1991.
- \$172 million in budget authority, a \$32 million increase over 1990, is requested for the FBI's anti-drug abuse activities.
- \$182 million in budget authority for the U.S. Attorneys to prosecute drug dealers and users, a \$45 million increase over 1990. A 30 percent increase, a total request of \$201 million, for the U.S. Marshals is also proposed.

- \$79 million in budget authority increase for the Judiciary branch, for a total of \$403 million, to try accused drug offenders.
- \$492 million in budget authority is requested for State and local law enforcement grants, a 10 percent increase over 1990.
- The Administration has proposed legislation to require States to adopt drug-testing programs throughout their criminal justice systems as a condition for receipt of Federal criminal justice funds.

2. *Treating the Drug User:* (page 114)

For 1991, the Administration requests nearly \$1.7 billion in budget authority for drug treatment activities, a 12 percent increase over 1990. This includes:

- \$760 million for Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) drug treatment grants and technical assistance for the States, an increase of 11 percent over 1990. (page 116)
- \$300 million for the Department of Veterans Affairs to provide drug treatment services. (page 116)
- Tripling the assistance for the smallest victims of the drug problem, "crack babies." (page 116)
- An increase of \$30 million for treatment research and data collection by HHS. (page 116)

3. *Preventing Drug Abuse: School, Workplace, and Community Prevention:* (page 116)

The 1991 budget requests an increase of 12 percent over 1990, or a total of \$1.4 billion in budget authority for drug prevention and education activities. This includes:

- \$496 million for drug prevention programs in the Department of Health and Human Services: Many of these programs fund prevention demonstration projects and research for high-risk youth populations. Drug prevention efforts for pregnant women remain a priority. (page 118)
- \$593 million for the Education Department's Drug-Free Schools and Communities Program: This represents a \$54 million increase over 1990. (page 118)
- \$150 million for drug programs for the Department of Housing and Urban Development, of which approximately half will be directed at preventing drug abuse in and around housing projects. (page 118)

Federal efforts will continue to support a drug-free Federal workplace. The Administration also will propose to strengthen drug-free workplace requirements for Federal contractors and grantees. (page 118)

F. PROTECTING THE ENVIRONMENT (page 119)

The budget provides over \$2 billion in new budget authority for initiatives to protect the environment.

1. Exercising Responsible Stewardship of America's Natural Resources: (page 120)

a. *America the Beautiful*: The budget proposes to establish a new "America the Beautiful" initiative comprised of the following: (page 120)

- *Land Acquisition*: The budget proposes to expand acquisition of high priority national parks, refuges, forests, and other public lands. The budget requests \$250 million in budget authority in 1991 for these purposes.
- *Reforestation*: The budget proposes \$175 million in budget authority for the first year of a multi-year initiative with these objectives: planting a billion trees on private land across America; and launching a community trees program, designed to plant another 30 million trees in towns and cities across America.
- *Enhancing recreation and restoring natural resources: Legacy '99*: The budget includes \$205 million in budget authority, 40 percent above 1990, for improved resource protection and restoration (including wetlands conservation and endangered species activities) and enhanced recreational opportunities in national parks, wildlife refuges, and other public lands.

b. *Protecting America's Wetlands*: The budget proposes an increase of \$88 million in budget authority, 24 percent above 1990, for wetlands research, protection, preservation, and enhancement. (page 123)

c. *Mitigating the Environmental Effects of Water Resource Development*: (page 124)

- The budget proposes \$16 million in budget authority for the Army Corps of Engineers to construct juvenile fish passage facilities on the Columbia and Snake Rivers in Washington, Oregon, and Idaho.
- The budget provides \$20 million in budget authority to begin the acquisition of 88,000 acres needed to mitigate environmental losses caused by the construction of the Tennessee-Tombigbee Waterway project in Alabama and Mississippi.

d. *Managing America's National Forests*: The budget proposes to end "below-cost" timber sales, on nine test forests where recreation and other uses have been increasing. "Above cost" sales on these forests will be allowed. (page 123)

2. Providing Tools for Effective Pollution Control: (page 126)

a. *Increase EPA's Operating Budget*: \$230 million in budget authority, a 12 percent increase above 1990, for EPA's operating budget. The increase would bring staffing growth since the beginning of the Administration to 1,630—an 11 percent increase. (page 126)

b. *Implementing Clean Air Changes*: An increase of over \$80 million in budget authority is requested to enable the agency to implement the ambitious new

proposals for revising the Clean Air Act proposed by the President last year. (page 126)

- c. *Enforcing Environmental Laws:* The budget calls for a 36 percent increase in EPA's enforcement budget. This will enable EPA to redouble its efforts to ensure that responsible parties pay for cleaning up the pollution they create. (page 126)
- d. *Protecting Critical Habitats:* The budget provides \$95 million in budget authority, an increase of 32 percent, for EPA's critical habitat programs, which seek to address pollution problems in the Nation's wetlands, estuaries, and near coastal waters. (page 127)
- e. *Revitalizing the Council on Environmental Quality:* The budget for CEQ will nearly double. (page 127)
- f. *Promoting Environmental Education:* In 1991, the President will present a cash award of \$5,000 to the 100 teachers—two in each State—who design and implement the most innovative and effective programs to teach students about the environment. (page 128)
- g. *Maintaining Environmental Infrastructure:* The budget proposes a \$91 million in budget authority expansion of the maintenance and rehabilitation efforts by the Department of the Interior that preserve the basic infrastructure of America's national parks, wildlife refuges, and other public lands. This is a 19 percent increase above 1990. (page 128)

3. *Cleaning Up Hazardous Wastes:* (page 129)

- a. *Accelerating the Pace of Superfund Cleanups:* The President has requested an increase of over \$200 million, which will be targeted toward cleanups. (page 129)
- b. *Cleaning up Federal Facilities:* The budget proposes an increase of nearly \$800 million in budget authority, or 21 percent above 1990 levels, for Federal facility cleanup efforts. (page 129)

4. *Laying the Groundwork for a Cleaner, Safer Future:* (page 129)

- a. *Global Climate Change Research:* The budget contains over \$1 billion in budget authority, an increase of 57 percent over the 1990 levels, for the U.S. Global Change Research Program, an interagency research effort designed to improve scientific understanding and predictive capability on global change issues. (page 129)
- b. *Encouraging the Development of Solar and Renewable Energy Sources:* The budget requests about \$360 million in budget authority for these activities, a substantial increase over the \$208 million requested in 1990. The budget will also request \$182 million for energy conservation R&D, almost double the 1990 request. (page 131)

G. IMPROVING THE NATION'S TRANSPORTATION INFRASTRUCTURE (page 133)

AVIATION

The President is proposing a total of \$8.6 billion in budget authority, a 16 percent increase, for aviation programs in 1991. This is the first year of a 5-year aviation reauthorization program to provide the necessary funding to modernize and expand the aviation infrastructure. (page 134)

1. *Keeping the Skies Safe and Secure:* The Administration is requesting \$4.1 billion, a \$264 million or 7 percent increase over 1990, for Federal Aviation Administration (FAA) operations. The budget also includes a \$20 million or 12 percent increase over 1990, for aviation research and development. (page 135)
2. *Modernizing Airspace System Equipment:* The budget proposes \$2.5 billion in budget authority, an increase of \$779 million, or 45 percent. (page 135)
3. *Expanding Airport Capacity:* (page 136)
 - a. *Increasing Federal funding for capacity projects:* The President's budget provides \$1.5 billion in new 1991 spending for Federal airport grants, a \$75 million increase over 1990. (page 137)
 - b. *Removing Federal restrictions:* The Administration proposes to remove existing statutory restrictions that prevent airports from raising certain revenue—namely by allowing airports to levy passenger facility charges (PFCs). Some estimates show PFCs could generate about \$1 billion per year for U.S. airports. (page 137)
4. *Financing the Aviation System:* The Administration proposes to increase aviation user fees to finance these significant increases in aviation spending. The passenger ticket fee would be raised from 8 to 10 percent and other aviation fees would be raised similarly. (page 137)

HIGHWAYS

For 1991, the budget provides Federal-aid highway funding to cover the Federal share of the cost to maintain the physical condition of bridges and highways of national importance and to continue completion of the Interstate System. The Federal-aid highway program is authorized through 1991. During this year, the Federal Government will work with its partners—States, local governments and the private sector—to address the projected needs for highways. The Administration will present its proposals in the context of the highway reauthorization for 1992 and beyond. (page 138)

H. BRINGING HOPE TO DISTRESSED COMMUNITIES (page 141)

1. *Expanding Tenant Management and Homeownership Opportunities:* (page 141)
 - a. *HOPE Grants:* To help low-income families become homeowners with a stake in their communities, the Administration proposes a new HOPE Grant Program. These grants will provide funds for resident management and homeownership in public housing, government-held vacant and foreclosed properties, and financially "distressed" properties. HOPE Grants will provide \$2.15 billion over 3 years with States, localities, or non-profit organizations

required to provide \$1 for every \$2 in Federal HOPE Grant funds. A total of \$250 million will be set aside to provide replacement housing for public housing developments that convert to low-income homeownership. (page 144)

- b. *Urban Homesteading*: The budget almost quadruples funding for this program for a total of \$50 million in 1991. (page 145)
 - c. *Prepayment Strategy*: The HOPE initiative proposes a three-pronged approach to protect tenants who would be adversely affected by much higher and unaffordable rents in housing projects where owners will become eligible to prepay their mortgages. (page 145)
 - d. *IRAs for Homebuyers*: To expand homeownership for young families and first-time homebuyers, the Administration proposes the use of Individual Retirement Accounts (IRAs) for buying a home. (page 146)
2. *Reducing or Eliminating Barriers to Low-Cost Housing*: (page 146)
- a. *Housing Opportunity Zones*: The budget proposes a Federal-local partnership to remove barriers to, and create incentives for, more affordable housing for low and moderate income families in distressed areas through designation of 50 housing opportunity zones, chosen through a competitive process. (page 146)
 - b. *Low-income Tax Credit*: The budget proposes to extend the low-income housing tax credit through December 1991 to encourage the new construction or rehabilitation of affordable rental housing in areas with rental housing shortages. (page 146)
3. *Helping Poor Families and Elderly Become Self-Sufficient*: (page 147)
- a. *Operation Bootstrap*: Starting in 1991, all housing vouchers provided to welfare families and others with very low incomes must be combined with a local program to help them escape from dependency. (page 147)
 - b. *Frail Elderly Housing Services Voucher*: The 1991 budget proposes a Service-Supported Housing Voucher Demonstration for the frail elderly—those persons of at least 62 years of age who need assistance with three or more simple activities of daily living—funded at \$44 million. \$34 million of housing vouchers will be linked with \$10 million for in-home services. (page 147)
4. *Helping the Homeless*: (page 147)
- a. The budget includes \$819 million for the *McKinney Act* programs, more than the \$727 million needed to “fully fund” the Act. (page 147)
 - b. *Special Homeless Initiatives*: (page 147)
 - *AFDC Families in Welfare Hotels*: The budget proposes a total of \$143 million for the McKinney Act Transitional Housing Demonstration program. This program is designed to develop innovative approaches to providing houses and supportive services to homeless individuals and families who can make the transition to independent living within 2 years.

- A new "Shelter Plus" Program to help the homeless mentally ill or recovering substance abuser. HUD would provide \$247 million in housing assistance for over 8,900 homeless mentally ill or recovering substance abusers.

5. *Creating Jobs and Economic Growth in Distressed Areas:* (page 148)

a. *Enterprise Zones:* Three tax incentives are included in the President's budget to encourage job creation and entrepreneurship in distressed areas: (page 148)

- A 5 percent refundable tax credit for the first \$10,500 of wages, up to \$525 per worker, to qualified employees for wages earned in an enterprise zone business.
- Expensing of investor purchases of newly issued corporate stock of businesses located in enterprise zones. This is an up-front deduction for up to \$50,000 per year of new equity investment, with a \$250,000 lifetime limit.
- A zero capital gains rate for gains on investment in tangible property used in an enterprise zone business and located within an enterprise zone at least two years.

I. PRESERVING NATIONAL SECURITY AND ADVANCING AMERICA'S INTERESTS ABROAD (page 151)

NATIONAL DEFENSE

The budget request for national defense is significantly less (\$14.3 billion in budget authority and \$5.5 billion in outlays) than the amounts included in the President's February 1989 budget for 1991. Budget savings in the 1991-93 period (relative to the previously-published levels) are \$63.6 billion in budget authority and \$29.7 billion in outlays. The actual savings relative to the full cost of the previously approved defense program are considerably higher—almost \$170 billion over 5 years. (page 151)

1. *Department of Defense—military:* The budget requests \$295.1 billion in budget authority and \$292.1 billion in outlays for the military functions of the DOD: (page 153).

a. *Operations:* Active duty end-strength will decline by the end of 1991 to a level of 2,038,800—91,429 below the actual FY 1989 level—with savings of \$1.7 billion. At the same time, to continue to assure force quality, readiness and training, the budget provides for a 3.5 percent pay raise, improved benefits, enlistment and re-enlistment bonuses, special pay for critical skills, and continuation of current training levels. (page 154)

- *Strategic forces:* Deployed forces will continue to include the Triad of land, air, and sea based systems, as well as air defense interceptors.
- *General purpose forces:* Land forces at the end of 1991 will include 19 active and 11 reserve Army and Marine divisions, two active divisions less than at the end of 1990. Naval forces will include 14 aircraft carrier battle groups and 15 tactical airwings (the same as in 1990), but two of the four U.S. battleships will be deactivated and the number of nuclear attack submarines will decrease by 5 in 1991. Air forces will include 24 active and 12 reserve Air Force fighter wing equivalents, 2 squadrons of B-52's dedicated to the

delivery of conventional weapons, and 25 strategic airlift squadrons. One Air Force fighter wing equivalent and one conventional B-52 squadron will be deactivated in 1990.

- *Special operations forces:* Through 1991, Army special forces battalions will increase from 13 to 15, and Air Force special operations units will gain 7 additional aircraft.

b. *Investment:*

- *Strategic systems:* To modernize all three components of the strategic Triad, procurement for 1991 includes the eighteenth Trident submarine and 52 Trident II missiles, 12 Peacekeeper missiles for operational testing and special railroad trains to provide mobility for Peacekeeper missiles. The budget requests funds for continued development of the small intercontinental ballistic missile. It also requests an increase for the Strategic Defense Initiative to a level of \$4.5 billion. This is \$0.9 billion more than in 1990, but \$1.0 billion less than previously planned.
- *Conventional systems:* To maintain well-equipped forces, the budget provides for procurement in 1991 of 225 M-1 Abrams tanks, 600 Bradley Fighting Vehicles, 72 Blackhawk utility helicopters, 14 new ships, 186 Air Force fighters, and six C-17 transport aircraft. Development will continue on the Army's experimental light helicopter (LHX) and improved ground force systems, the Advanced Air-to-Air Missile System, P-7 anti-submarine warfare aircraft, and next generation tactical aircraft. Fifteen systems will be terminated with associated savings of \$3 billion. These are in addition to the five systems terminated in the FY 1990 budget.
- *Research and Technology:* The budget requests \$38.0 billion in budget authority and \$37.0 billion in outlays for research, development, testing and evaluation—\$1.2 billion and \$0.4 billion, respectively, more than 1990 levels. The request includes \$3.4 billion to develop technology options for future U.S. weapon systems and to guard against technological surprise by our adversaries.

c. *Base Closures:* The budget requests \$916 million for continued implementation of the Base Closure and Realignment Act approved by Congress in 1989. \$500 million was provided in the 1990 budget for this purpose. Additional domestic base closures will be studied this year and units will be withdrawn from some overseas bases. (page 156)

d. *Drug Interdiction:* The budget requests \$1.2 billion for an aggressive Defense counternarcotics program, \$0.3 billion more than 1990. (page 156)

2. *Atomic Energy Activities:* The budget proposes budget authority of \$11 billion and outlays of \$10.4 billion, compared to \$9.7 billion and \$8.9 billion, respectively, for 1990. (page 156)

The budget includes \$2.8 billion in budget authority for waste cleanup at various Department of Energy facilities. This represents an increase of \$601 million, or 27 percent above 1990. The budget also includes an increase of \$178 million in budget authority for Federal facility cleanup activities in other agencies.

Governmentwide, the increase above 1990 for Federal facility cleanup is 21 percent. (page 257)

3. *Defense-Related Activities*: These activities include civil defense and emergency preparedness activities of the Federal Emergency Management Agency, the efforts of the Selective Service System, and the Maritime Administration's Ready Reserve Force. The budget requests \$760 million in budget authority and \$705 million in outlays for these purposes, as compared with \$609 million and \$648 million, respectively, in 1990. (page 157)

INTERNATIONAL AFFAIRS

The budget requests budget authority of \$20 billion and outlays of \$18.2 billion for international affairs activities, \$1.4 billion and \$3.6 billion more, respectively, than in 1990. The high growth in outlays reflect in part the cessation in 1991 of certain large receipts. (page 158)

1. *Foreign Aid*: The budget requests \$14.9 billion in budget authority and \$14.2 billion in outlays for foreign aid, \$1 billion and \$3 billion, respectively, more than in 1990. Much of the increase in outlays in 1991 is due to the prepayment in 1990 of past loans for military goods and services. The budget reflects an emphasis on Eastern Europe, counter-narcotics, and the U.S. role in the multilateral development banks (MDBs). (page 159)
 - a. *Security Assistance*: The budget requests \$8.8 billion in both budget authority and outlays for international security assistance, \$0.4 billion and \$2.5 billion, respectively, more than in 1990. The largest component of security assistance requested—\$5.1 billion, or 61 percent—provides military and economic support to Israel and Egypt. Furthering their efforts to achieve a lasting peace in the Middle East remains a high priority of U.S. foreign policy. (page 160)
 - *Narcotics control*: The budget requests \$528 million in budget authority and \$270 million in outlays for international narcotics control. The requested funding will finance the second year of the plan to reduce the flow of cocaine from the Andean countries of Colombia, Peru, and Bolivia. The major increment in this program will be \$175 million of new aid for the economies of those countries that evidence a determination to attack seriously the narcotics problem.
 - b. *Development and Humanitarian Assistance*: The budget proposes \$6.1 billion in budget authority and \$5.4 billion in outlays for development and humanitarian assistance, \$0.6 billion and \$0.5 billion, respectively, more than in 1990. This funding is to encourage market-oriented economies through budgetary support, capital projects and technical assistance; to provide relief from major disasters; and to provide humanitarian assistance such as refugee care. The request includes \$1.9 billion in budget authority for bilateral economic assistance programs administered by AID and \$1.7 billion in budget authority for U.S. contributions to multilateral development banks such as the World Bank. (page 161)
 - *Special assistance for Eastern Europe and the Philippines*: The major emphasis of the increases in foreign aid in 1991 is support of democracy abroad. The budget requests \$300 million for a special assistance initiative for those

countries in Eastern Europe that are moving toward democracy and attempting to develop free-market economies. The budget also requests \$200 million for special assistance to the Philippines.

- *Refugees*: The budget requests \$451 million in budget authority and \$435 million in outlays for refugee programs, \$82 million and \$49 million, respectively, more than in 1990.
 - *Multilateral development assistance*: The budget requests \$3.2 billion in contributions over the next 3 years to the International Development Association (IDA), an agency of the World Bank. This proposed funding, when matched by funding from other countries, will permit IDA to provide an average of \$5.5 billion in annual long-term lending to the poorer developing countries.
2. *Diplomacy*: The budget requests budget authority of \$5.3 billion and outlays of \$4.5 billion, \$1 billion and \$0.4 billion, respectively, more than in 1990. (page 161)
- a. *The conduct of foreign affairs*: Funds sought for the basic salaries and expenses of the State Department are \$1.9 billion in budget authority and \$1.8 billion in outlays. (page 162)
- *Payments to international institutions*: The budget requests \$1.4 billion in budget authority and \$0.9 billion in outlays for international organizations that are important to U.S. interests, an increase of \$712 million and \$187 million, respectively, over 1990 levels. The request includes \$794 million for regularly scheduled payments and \$620 million to eliminate arrearages in U.S. mandatory contributions to the United Nations and related agencies.
 - *Reconstruction of the Moscow Embassy*: The budget requests \$270 million in budget authority and \$10 million in outlays to construct, under extraordinary technical standards, a more secure building for diplomatic representation and negotiations.
- b. *Public Diplomacy*: Among the various programs in this area, the budget requests \$154 million for exchange programs and \$125 million for USIA's Voice of America to continue its major modernization of radio broadcasting capacity. (page 162)
3. *International Financial Programs*: For 1991, the Export-Import Bank will provide \$500 million in loans and \$10.6 billion in guarantees and insurance to support U.S. export sales. (page 163)

J. PRESERVING AMERICA'S HERITAGE (page 165)

The budget proposes \$757 million in direct funding of activities that preserve, pass on and contribute to the American heritage, 9 percent more than enacted in 1990.

1. *National Endowment for the Arts*: The budget requests \$175 million in budget authority for the National Endowment for the Arts, \$4 million more than enacted in 1990. (page 166)

2. *National Endowment for the Humanities*: \$165 million in budget authority for the National Endowment for the Humanities, \$8 million more than enacted in 1990. (page 166)
3. *Institute for Museum Services*: \$24 million in budget authority for the Institute of Museum Services, \$1 million more than enacted in 1990. (page 166)
4. *Smithsonian Institution*: \$308 million in budget authority for the Smithsonian Institution, roughly \$41 million more than enacted in 1990. The budget includes \$19.4 million toward establishment of a new National Museum for the American Indian. (page 167)
5. *National Gallery of Art*: \$49 million in budget authority for the National Gallery of Art, \$7 million more than enacted in 1990. (page 167)
6. *Historic Preservation Fund Program*: \$34 million in budget authority for the Historic Preservation Fund Program of the National Park Service, \$1.4 million more than enacted in 1990. (page 167)

II. ADVANCING STATES AS LABORATORIES (page 169)

The President's budget highlights and expands the effort of the Federal government to foster and finance innovation in the States. In the areas of education and low-income programs in particular, the President's program supports important innovations and experiments, including steps to reduce Federal controls and regulations in order to give State Governors and legislators greater latitude to try new methods.

III. REFORMING MANDATORY PROGRAMS (page 181)

Mandatory spending encompasses entitlements and a wide variety of other benefits, services, and subsidies ranging from social services to electric power distribution subsidies. The element common to all mandatory spending is that it tends to be "automatic" in the sense that it is not normally controlled through the annual congressional appropriations process in the way other spending, termed "discretionary" is. Mandatory spending is now almost half of total Federal spending and will exceed 50 percent by 1994.

The sheer size of the mandatory program universe dictates careful attention to spending, which if allowed to grow unexamined can limit the Nation's future in several ways. Reforms are proposed in a number of mandatory programs, though most mandatory programs will still have higher outlays in 1991 than 1990.

IV. ACKNOWLEDGING INHERITED CLAIMS (page 213)

A. ACCOUNTING FOR DEBT AND UNFUNDED ANNUITIES

The Government owes \$2.2 trillion of principal to the people who have loaned it the money to pay for past deficits. This year it will pay an estimated \$176 billion of net interest. The present deficit is continuing to increase the amount of debt, although less rapidly than several years ago.

Annuity programs have also created large and growing obligations on future taxpayers. The Government spent \$382 billion in 1989 for social security, medicare, and Federal employee retirement programs, and the budget estimates it will spend \$433 billion in 1991. These programs are projected to become much larger relative to the economy in future decades than they are now.

A thorough discussion of possible future claims under this heading is at pages 215–228 of the *Budget*.

B. FEDERAL UNDERWRITING RISKS—CREDIT AND INSURANCE PROGRAMS

The Federal Government is the Nation's largest source of credit and underwriter of risk. Too little attention was paid in the past to the scope and scale of these commitments, and often the Government's potential exposure was understated or ignored. Events of the past few years, including insolvency of the Federal Savings and Loan Insurance Corporation and many insured thrifts, the bailout of the Farm Credit System, and mounting losses in mortgage insurance programs, provide hard evidence of the magnitude of the threat. This budget reexamines and begins to restructure Federal credit and insurance programs. Please see pages 229–255 for a more complete discussion of these issues than has been presented in previous budgets.

C. CLEANING UP FEDERAL FACILITIES

The President is committed to cleaning up environmental contamination from past practices at federally owned facilities across the country, and to ensuring that Federal agencies meet or exceed all environmental standards required by relevant laws and regulations. Agencies have the responsibility to operate within these laws, and citizens have the right to insist that Federal agencies be good neighbors.

The budget contains major increases in funding for several agencies that will result in significant progress toward the goal of bringing Federal facilities into compliance with environmental laws. (pages 257–262)

V. MANAGING FOR INTEGRITY AND EFFICIENCY (page 263)

A. REFORMING THE BUDGET PROCESS (page 265)

The congressional budget process does not work well. The budget suggests several reforms to improve the discipline and effectiveness of the Federal budgeting system:

1. Joint budget resolution (page 265)
2. Improved budget measuring and "scorekeeping" (page 265)
3. Biennial budgeting (page 265)
4. Enhanced rescission authority (page 266)

5. Restraining supplemental appropriations (page 266)
6. Closing loopholes in G-R-H (page 267)
7. Reinforcing sequester (page 267)
8. Protecting the social security trust fund (page 267)
9. Amending the Constitution (page 268)
 - Balanced budget amendment
 - Line item veto

B. RESTORING A BASIS FOR CONFIDENCE (page 271)

1. *Reducing Investment in Low Return Programs* (page 271)

Total budget authority for domestic discretionary programs, which are defined as those controlled through the annual appropriations process, is proposed to increase from \$160.5 billion in 1990 to \$167.4 billion in 1991. Outlays are estimated to increase from \$184.2 billion in 1990 to \$194.4 billion in 1991. These changes are the net result of many proposed increases and decreases. Previous sections have highlighted increases. This section of the budget details the principal decreases in domestic discretionary programs.

2. *Strengthening Management Oversight* (page 278)

American citizens have the right to expect that their Government will not tolerate recurrent scandals, such as in housing programs and procurement for national defense. They have the right to better assurance that Federal activities will not pollute the neighborhoods in which they operate or the ecosystem itself. They have the right to expect that their hard earned tax dollars will go to broad national purposes and not to those who can muscle legislators or officials for special breaks. Americans also have the right to first rate service delivery, systems to provide for Government efficiency and integrity, and a skilled and well-motivated Federal workforce. Better provision for these rights and expectations will improve the basis for confidence in democratic institutions.

The budget requests \$22.1 billion in budget authority and \$19.9 billion in outlays—\$2.9 billion and \$2.4 billion, respectively, more than in 1990—to improve Government management.

Initiatives to strengthen management oversight include:

- a. *Defense Management Reform*: The budget includes 1991 management savings in the Department of Defense's operations of \$2.3 billion. These savings will result from implementation of the recommendations in the Defense Management Report, which the President transmitted to Congress in July 1989. Personnel reductions of approximately 8,000 civilians and 8,000 military are expected in 1991 as a result of these reforms. In addition, the Department of Defense estimates these savings will increase to a total of \$39 billion by 1995. (page 283)
- b. *Enhanced Collection of Taxes and Tax Debt*: To slow the growth in tax debt (currently \$61 billion), the budget includes funding for the first phase of a 3-year tax collection initiative, the overall objective of which is to increase

collections by \$2.25 billion over the 1991-93 time period. The first phase will generate \$759 million in revenues over this interval from 1,050 additional collection personnel to be hired in 1991. The Internal Revenue Service also plans to reallocate existing resources so as to provide additional revenues of \$2.5 billion in 1991. (page 284)

- c. *Enhanced Collection of Non-Tax Debt:* The budget requests an additional \$55 million to accelerate non-tax collections, an investment which will improve management controls and realize a return of \$200 million in 1991. Additional staff positions are planned for account servicing in the Department of Agriculture's Farmers Home Administration and the Department of Veterans Affairs. Over 400 positions have been allocated to HUD field offices to improve portfolio management. (page 284)
- d. *Selected Improvements in Service Delivery:* To improve service delivery, the budget requests \$6.1 billion and over 120,000 staff in 1991 for the IRS, \$635 million more than in 1990; \$4.2 billion for operating the Social Security Administration, \$330 million more than in 1990; \$8.6 billion for the Federal Aviation Administration (FAA), \$1.2 billion more than in 1990; \$507 million for selected Federal economic statistics programs, \$52 million more than in 1990. (page 280)
- e. *Rebuilding the Public Trust:* The budget requests an increase of \$76 million, 10 percent more than 1990, and 670 additional staff who will assist in implementing the HUD Reform Act of 1989. The budget also requests an increase of \$32 million for HUD automated data systems, including financial management systems, 44 percent more than in 1990, and \$8 million for the HUD Inspector General to improve monitoring and review of HUD programs. (page 280)
- f. *Strengthening the Savings and Loan Industry:* The Administration proposed comprehensive reform, and Congress enacted the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) of 1989 in August. The legislation imposes a number of new requirements on the industry and its regulators to assure the safety and soundness of nearly \$1 trillion of insured deposits; it also establishes a Resolution Trust Corporation (RTC) to handle the merger, sale or liquidation of 500-600 insolvent S&Ls. (page 280)
- g. *Cleaning up Hazardous Waste Dumps:* The Environmental Protection Agency will in 1990 increase enforcement and tighten oversight of the Superfund toxic waste response program. EPA will impose a 120-day deadline on negotiations with polluters and exercise its authority to order cleanup if settlement is not reached. Increased enforcement has already resulted in \$1 billion in polluter-financed clean-up activities for 1989, nearly double that in 1988. The budget provides for a \$210 million increase in 1991 to clean up additional hazardous waste sites. This investment builds on the actions of the Administration to provide 480 additional staff at the Department of Justice and EPA (a nearly 40 percent increase) to strengthen Superfund enforcement in 1990. (page 281)
- h. *Improving the Integrity of Student Aid Programs:* To reduce guaranteed student loan defaults and other losses from inadequate program management, the Department of Education is pursuing a three-pronged strategy of

strengthened regulations, administrative actions, and changes in law. (page 281)

- i. *Improving Pension Oversight:* The budget requests an increase of 133 investigative and legal support staff and an additional \$9.3 million in the Department of Labor to strengthen oversight of private pension plans through the Pension and Welfare Benefits Administration. The additional staff will enable the Department to increase reviews and investigations by more than 50 percent and reporting enforcement investigations by 80 percent. (page 281)
- j. *The Inspectors General:* Over the 2-year period 1990 to 1991, the budget specifically adds 67 staff and \$6.9 million for the Department of Energy to deal with procurement fraud, increase audits (including environmental audits), and increase investigations and analysis. It also includes resources for additional audit coverage of international program activities at the Department of Agriculture; increased audit and investigation coverage of the Pell Grant, education for the handicapped and student loan programs at the Department of Education; increased auditing and investigative work at the Department of the Interior; enhanced ADP capabilities at the Department of the Treasury; additional personnel to provide adequate coverage of the Superfund and underground storage tank programs at EPA; and additional audits of contractors at NASA. (page 281)
- k. *Internal Controls and Audit Follow-up:* The budget requests \$3 million and 41 staff to establish or augment offices better to coordinate and manage internal controls and audit follow-up at the Departments of Agriculture (Farmers Home Administration), Housing and Urban Development, Interior and Veterans Affairs, and at NASA. Working with the agencies, OMB has identified more than 100 high-risk areas; and a central tracking system has been established to monitor corrective actions. Deputy Secretaries and Deputy Administrators have been told that it is their personal responsibility to ensure that management integrity is maintained and strengthened and that their agencies' progress must be reported regularly. OMB is also revising its instructions to agencies to require budget information sufficient to ensure necessary resources to correct high risk weaknesses. (page 281)
- l. *Presidential Priority Systems:* The budget requests nearly \$2 billion to design, acquire, and operate program information systems which the Administration has established as Presidential Priority Systems, \$402 million more than in 1990. These systems include the Social Security Administration's Information Technology System, Patent and Trademark automation, the Department of the Treasury's tax system modernization, government-wide financial management systems, the General Services Administration's FTS 2000 system, systems under the Department of Transportation's National Airspace Plan, the Integrated Border Information System, the Department of Commerce's Advanced Weather System, and the Securities and Exchange Commission's EDGAR System. (page 282)
- m. *Management Support Systems:* The budget requests \$558 million for management support systems enhancement, \$54 million more than in 1990. These funds will permit continued improvement of financial systems throughout the government so as to provide more accurate and timely information to agency

managers and central agencies. The funds will also assist linking these systems electronically in a government-wide network. (page 282)

- n. *Credit Management Systems*: The budget requests \$860 million for credit management an increase of \$58 million over 1990. The Office of Management and Budget and the Department of the Treasury have also upgraded the effort to implement the comprehensive credit management and debt collection program known as the "Nine-Point Program." (page 282)
- o. *Pay Reform*: The budget allows agencies to use up to \$328 million to begin Federal pay reform. The Administration will seek legislation to authorize geographic differentials for all personnel of up to 8 percent in New York, Los Angeles and San Francisco; 5 percent increases in starting salaries nationwide at GS-5 and GS-7 levels for college entry-level occupations; the extension of current authority to hire at pay levels above the minimum step to all grades; and bonuses to recruit, retain or relocate critical skill workers. The budget will also continue pay demonstrations in the Defense Department, the Federal Aviation Administration and the National Institute of Standards and Technology to demonstrate the effects of pay on recruitment and retention. (page 283)

C. MANAGING BY OBJECTIVES

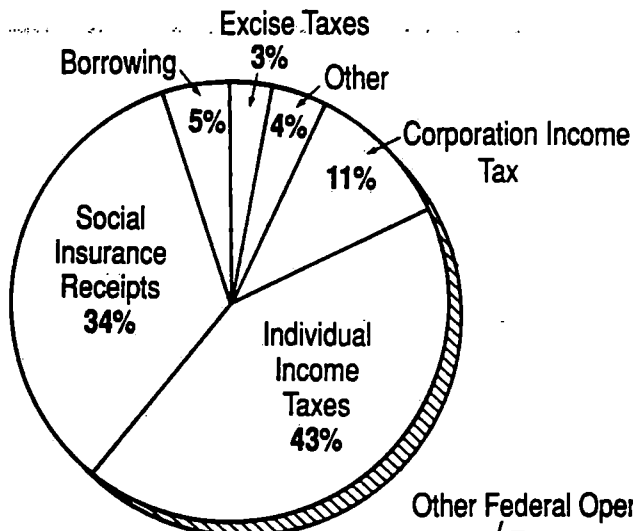
In *Building a Better America*, President Bush directed the establishment of a Presidential Management by Objectives (MBO) system. Its purpose is to track the implementation of selected major policy initiatives and priorities of the Administration from the time of their formulation and announcement to their ultimate outcomes.

The President approved specific objectives for each of the Cabinet departments and participating agencies, as well as Government-wide cross-cutting objectives, in July 1989. The departments and agencies have prepared strategies for achieving these objectives and have identified milestones for measuring their progress. The budget requests resources for the Presidentially approved objectives within overall spending constraints. The objectives themselves are listed at pages 289-300 of the *Budget*.

The Federal Government Dollar

Fiscal Year 1991 Estimate

Where It Comes From...



Where It Goes...

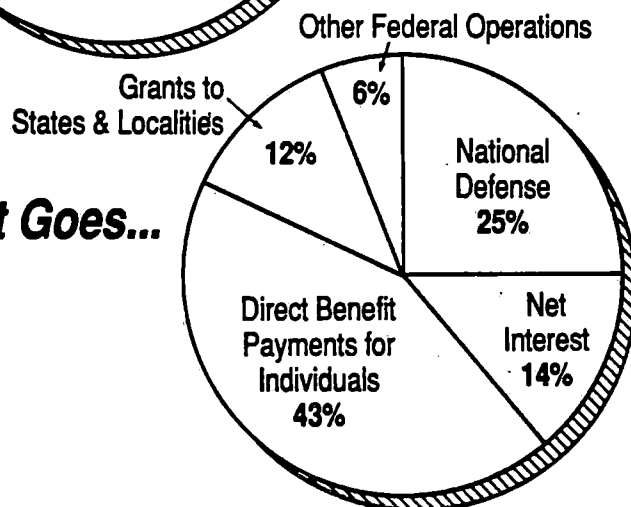


Table 1. RECEIPTS, OUTLAYS, DEFICIT/SURPLUS UNDER THE PRESIDENT'S PROPOSED POLICY

(In billions of dollars)

	1989	1990	1991	1992	1993	1994	1995
Receipts	990.7	1,073.5	1,170.2	1,246.4	1,327.6	1,408.6	1,486.3
Outlays	1,142.6	1,197.2	1,233.3	1,271.4	1,321.8	1,398.0	1,476.9
Surplus or Deficit (+/-)	-152.0	-123.8	-63.1	-25.1	+5.7	+10.7	+9.4

Note: Detail may not add to total due to rounding.

Table 2. OUTLAYS BY FUNCTION: 1989-95

(In billions of dollars)

Function	1989 actual	Estimate					
		1990	1991	1992	1993	1994	1995
050 National defense.....	303.6	296.3	303.3	309.2	311.9	315.7	318.6
(Department of Defense—Military).....	(294.9)	(286.8)	(292.1)	(296.9)	(299.0)	(302.3)	(304.8)
(Other).....	(8.7)	(9.6)	(11.1)	(12.3)	(12.9)	(13.4)	(13.7)
150 International affairs.....	9.6	14.6	18.2	19.4	18.8	18.9	19.7
250 General science, space, and technology	12.8	14.1	16.6	19.4	21.4	22.9	24.0
270 Energy.....	3.7	3.2	3.0	3.1	3.2	3.0	2.6
300 Natural resources and environment.....	16.2	17.5	18.2	18.9	18.4	18.3	17.8
350 Agriculture.....	16.9	14.6	14.9	15.6	13.5	11.8	10.4
370 Commerce and housing credit.....	27.7	22.7	17.2	10.3	9.6	7.7	6.2
(On-budget).....	(28.0)	(20.3)	(15.5)	(9.6)	(9.5)	(7.8)	(6.6)
(Off-budget).....	(-0.3)	(2.4)	(1.7)	(0.7)	(0.1)	(-0.1)	(-0.4)
400 Transportation.....	27.6	29.2	29.8	30.2	30.7	31.3	31.3
450 Community and regional development..	5.4	8.8	7.8	6.5	6.1	5.9	6.2
500 Education, training, employment, and social services.....	36.7	37.7	41.0	42.9	43.5	44.1	44.9
550 Health.....	48.4	57.8	63.7	69.9	75.9	82.0	88.3
570 Medicare.....	85.0	96.6	98.6	110.1	121.9	135.0	149.1
600 Income security.....	136.0	146.6	153.7	159.6	166.3	174.6	181.4
650 Social security.....	232.5	248.5	264.8	280.9	297.7	314.6	331.4
(On-budget).....	(5.1)	(3.9)	(4.7)	(5.6)	(6.0)	(6.4)	(6.9)
(Off-budget).....	(227.5)	(244.6)	(260.1)	(275.3)	(291.7)	(308.2)	(324.6)
700 Veterans benefits and services.....	30.1	28.9	30.3	31.0	33.3	32.6	31.7
750 Administration of justice.....	9.4	10.5	12.6	13.9	14.2	14.3	14.6
800 General government.....	9.1	10.6	11.3	11.9	25.8	65.2	113.5
900 Net interest.....	169.1	175.6	173.0	163.5	157.0	147.8	136.1
(On-budget).....	(180.5)	(191.2)	(192.9)	(188.1)	(187.1)	(184.1)	(178.9)
(Off-budget).....	(-11.4)	(-15.6)	(-19.9)	(-24.6)	(-30.1)	(-36.3)	(-42.8)
920 Allowances:							
Employee health benefits reform.....			-0.8	-0.9	-1.0	-1.0	-1.1
Reduced Government mail rates.....			-0.2	-0.2	-0.2	-0.2	-0.2
Total allowances.....			-1.1	-1.1	-1.2	-1.2	-1.3
950 Undistributed offsetting receipts:							
Employer share, employee retirement:							
On-budget.....	-29.4	-28.3	-30.1	-30.8	-32.1	-33.9	-35.0
Off-budget.....	-4.9	-5.6	-6.0	-6.5	-7.1	-7.7	-8.3
Rents and royalties on the Outer Continen- tal Shelf.....	-2.9	-2.6	-3.0	-3.4	-3.1	-3.3	-3.3
Sale of major assets.....			-1.3	-1.6	-1.6	-1.6	-1.6
Other undistributed offsetting receipts.....			-3.3	-1.5	-2.3	-0.1	-1.3
Total undistributed offsetting receipts....	-37.2	-36.5	-43.6	-43.8	-46.2	-46.6	-49.5
(On-budget).....	(-32.4)	(-30.9)	(-37.6)	(-37.4)	(-39.1)	(-38.9)	(-41.2)
(Off-budget).....	(-4.9)	(-5.6)	(-6.0)	(-6.5)	(-7.1)	(-7.7)	(-8.3)
Total outlays.....	1,142.6	1,197.2	1,233.3	1,271.4	1,321.8	1,398.0	1,476.9
(On-budget).....	(931.7)	(971.5)	(997.4)	(1,026.5)	(1,067.1)	(1,133.9)	(1,203.8)
(Off-budget).....	(210.9)	(225.8)	(236.0)	(244.9)	(254.7)	(264.1)	(273.1)

Note: Detail may not add to total due to rounding.

Table 3. BUDGET AUTHORITY BY FUNCTION: 1989-95

(In billions of dollars)

Function	1989 actual	Estimate					
		1990	1991	1992	1993	1994	1995
050 National defense.....	299.6	301.6	306.9	312.5	317.5	321.6	325.7
(Department of Defense—Military).....	(290.8)	(291.4)	(295.1)	(300.0)	(304.4)	(308.0)	(311.8)
(Other).....	(8.7)	(10.3)	(11.7)	(12.6)	(13.1)	(13.6)	(13.9)
150 International affairs.....	17.3	18.6	20.0	19.6	20.1	20.5	21.6
250 General science, space, and technology	12.9	14.6	17.9	20.8	22.7	24.1	25.0
270 Energy.....	4.1	5.6	3.3	4.1	4.6	4.4	4.2
300 Natural resources and environment.....	17.0	17.0	17.6	18.0	17.5	17.2	16.4
350 Agriculture.....	21.3	18.0	20.1	21.1	18.9	14.9	15.1
370 Commerce and housing credit.....	61.9	19.6	14.3	13.9	13.8	15.5	14.4
(On-budget).....	(60.3)	(15.5)	(11.3)	(11.7)	(12.1)	(13.9)	(13.0)
(Off-budget).....	(1.6)	(4.1)	(3.0)	(2.2)	(1.7)	(1.5)	(1.4)
400 Transportation.....	29.3	31.2	30.3	31.3	31.7	31.7	32.4
450 Community and regional development..	7.9	9.0	7.0	6.2	6.2	6.1	6.1
500 Education, training, employment, and social services.....	38.8	39.6	42.0	42.9	43.7	44.4	45.0
550 Health.....	51.7	60.3	64.8	70.9	76.8	83.0	89.6
570 Medicare.....	107.3	116.9	125.2	136.4	150.8	164.9	178.8
600 Income security.....	173.4	183.2	198.9	204.4	211.9	221.1	227.7
650 Social security.....	285.0	310.5	345.1	374.0	405.1	438.8	468.7
(On-budget).....	(5.1)	(3.9)	(4.7)	(5.6)	(6.0)	(6.4)	(6.9)
(Off-budget).....	(279.9)	(306.6)	(340.4)	(368.4)	(399.1)	(432.4)	(461.8)
700 Veterans benefits and services.....	30.0	30.0	31.0	31.5	32.1	32.8	33.6
750 Administration of justice.....	10.0	12.2	12.6	13.2	14.2	14.4	14.9
800 General government.....	10.6	10.5	11.4	11.6	25.7	65.3	113.7
900 Net interest.....	169.1	175.6	173.0	163.5	157.0	147.8	136.1
(On-budget).....	(180.5)	(191.2)	(192.9)	(188.1)	(187.1)	(184.1)	(178.9)
(Off-budget).....	(-11.4)	(-15.6)	(-19.9)	(-24.6)	(-30.1)	(-36.3)	(-42.8)
920 Allowances:							
Employee health benefits reform.....			-0.8	-0.9	-1.0	-1.0	-1.1
Reduced Government mail rates.....			-0.2	-0.2	-0.2	-0.2	-0.2
Total, 920 Allowances.....			-1.1	-1.1	-1.2	-1.2	-1.3
950 Undistributed offsetting receipts:							
Employer share, employee retirement:							
On-budget.....	-29.4	-28.3	-30.1	-30.8	-32.1	-33.9	-35.0
Off-budget.....	-4.9	-5.6	-6.0	-6.5	-7.1	-7.7	-8.3
Rents and royalties on the Outer Continen- tal Shelf.....	-2.9	-2.6	-3.0	-3.4	-3.1	-3.3	-3.3
Sale of major assets.....			-1.3	-1.6	-1.6	-1.6	-1.6
Other undistributed offsetting receipts.....			-3.3	-1.5	-2.3	-0.1	-1.3
Total, 950 Undistributed Offsetting Receipts.....	-37.2	-36.5	-43.6	-43.8	-46.2	-46.6	-49.5
(On-budget).....	(-32.4)	(-30.9)	(-37.6)	(-37.4)	(-39.1)	(-38.9)	(-41.2)
(Off-budget).....	(-4.9)	(-5.6)	(-6.0)	(-6.5)	(-7.1)	(-7.7)	(-8.3)
Total Budget Authority.....	1,309.9	1,337.6	1,396.5	1,451.1	1,522.7	1,620.9	1,718.1
(On-budget).....	(1,044.6)	(1,048.1)	(1,079.0)	(1,111.6)	(1,159.1)	(1,231.0)	(1,306.0)
(Off-budget).....	(265.3)	(289.5)	(317.5)	(339.6)	(363.7)	(389.9)	(412.1)

Note: Detail may not add to total due to rounding.

Table 4. BUDGET AUTHORITY BY AGENCY: 1989-1995

(In billions of dollars)

Department or other unit	1989 actual	Estimate					
		1990	1991	1992	1993	1994	1995
Legislative Branch.....	2.3	2.2	2.7	2.7	2.7	2.9	2.9
The Judiciary.....	1.5	1.7	2.1	2.3	2.3	2.4	2.5
Executive Office of the President.....	0.1	0.3	0.4	0.4	0.4	0.4	0.4
Funds Appropriated to the President.....	11.0	12.4	12.4	12.7	13.1	13.3	13.9
Agriculture.....	55.7	55.1	55.3	56.2	55.3	53.4	55.9
Commerce.....	2.8	3.6	2.5	2.4	2.5	2.4	2.2
Defense—Military.....	290.8	291.4	295.1	300.0	304.4	308.0	311.8
Defense—Civil.....	37.2	36.7	38.4	40.1	42.3	44.6	46.7
Education.....	23.0	24.1	24.6	24.2	24.4	24.5	24.7
Energy.....	11.7	14.3	14.8	16.9	17.6	17.8	18.0
Health and Human Services—except social security.....	196.6	212.3	232.4	249.3	270.7	293.5	314.3
Health and Human Services—social security	279.9	306.6	340.4	368.4	399.1	432.4	461.8
Housing and Urban Development.....	14.3	18.4	23.7	22.2	22.2	21.9	22.1
Interior.....	5.5	6.2	5.6	5.7	5.7	5.8	5.7
Justice.....	6.7	8.6	8.9	9.3	9.8	9.8	10.1
Labor.....	29.9	32.5	32.1	32.3	33.0	33.5	33.9
State.....	4.1	4.2	5.5	4.7	4.8	4.9	5.1
Transportation.....	28.5	30.2	29.3	30.3	30.7	30.7	31.3
Treasury.....	232.1	248.5	256.1	258.9	275.9	316.5	363.2
Veterans Affairs.....	29.9	29.9	30.9	31.4	32.0	32.7	33.5
Environmental Protection Agency.....	5.1	5.4	5.4	5.2	5.0	4.4	3.9
General Services Administration.....	0.2	0.1	*	0.1	0.1	0.1	0.1
National Aeronautics and Space Administra- tion.....	11.0	12.3	15.2	17.6	19.3	20.3	21.0
Office of Personnel Management.....	51.2	55.6	58.2	61.3	64.5	68.0	70.8
Small Business Administration.....	0.4	0.9	0.4	0.5	0.5	0.5	0.6
Other Independent Agencies.....	67.5	21.3	17.8	19.6	19.6	21.5	20.0
Allowances.....			-1.1	-1.1	-1.2	-1.2	-1.3
Undistributed offsetting receipts.....	-89.2	-97.3	-112.6	-122.5	-133.7	-144.0	-156.8
(On-budget).....	(-72.9)	(-76.1)	(-86.8)	(-91.4)	(-96.5)	(-100.0)	(-105.6)
(Off-budget).....	(-16.3)	(-21.2)	(-25.9)	(-31.1)	(-37.2)	(-44.0)	(-51.1)
Total budget authority.....	1,309.9	1,337.6	1,396.5	1,451.1	1,522.7	1,620.9	1,718.1

Note: Detail may not add to total due to rounding.

* \$50 million or less.

Table 5. OUTLAYS BY AGENCY: 1989-1995

(In billions of dollars)

Department or other unit	1989 actual	Estimate					
		1990	1991	1992	1993	1994	1995
Legislative Branch.....	2.1	2.3	2.7	2.8	2.7	2.8	2.8
The Judiciary.....	1.5	1.7	2.0	2.2	2.3	2.4	2.4
Executive Office of the President.....	0.1	0.2	0.3	0.4	0.4	0.4	0.4
Funds Appropriated to the President.....	4.3	9.2	12.2	13.2	12.5	12.5	13.3
Agriculture.....	48.3	48.2	48.7	50.3	48.7	47.8	47.4
Commerce.....	2.6	3.9	2.8	2.7	2.7	2.6	2.3
Defense—Military.....	294.9	286.8	292.1	296.9	299.0	302.3	304.8
Defense—Civil.....	23.5	24.8	25.5	26.6	27.7	28.8	29.9
Education.....	21.6	22.3	23.7	24.1	24.1	24.3	24.5
Energy.....	11.4	12.3	13.4	15.7	16.5	17.2	17.7
Health and Human Services—except social security.....	172.3	191.2	204.1	222.6	241.2	262.9	283.9
Health and Human Services—social security	227.5	244.6	260.1	275.3	291.7	308.2	324.6
Housing and Urban Development.....	19.7	22.8	23.0	23.9	24.3	25.0	26.1
Interior.....	5.2	5.8	5.7	5.7	5.8	5.8	5.7
Justice.....	6.2	6.9	9.0	10.1	9.9	9.7	9.9
Labor.....	22.7	24.9	26.3	27.0	27.8	28.7	29.8
State.....	3.7	3.8	4.1	4.3	4.4	4.5	4.6
Transportation.....	26.6	28.3	28.8	29.1	29.7	30.2	30.2
Treasury.....	230.6	247.2	254.9	257.7	274.5	315.1	361.9
Veterans Affairs.....	30.0	28.7	30.1	30.8	33.1	32.5	31.6
Environmental Protection Agency.....	4.9	5.5	5.8	5.7	5.6	5.4	5.2
General Services Administration.....	-0.5	0.3	*	0.3	0.3	0.2	0.1
National Aeronautics and Space Administra- tion.....	11.0	12.0	14.1	16.4	18.1	19.4	20.1
Office of Personnel Management.....	29.1	33.2	33.6	34.8	37.4	39.8	42.3
Small Business Administration.....	0.1	1.1	0.3	0.1	0.2	0.3	0.4
Other Independent Agencies.....	32.5	26.6	23.5	16.4	16.0	14.4	13.3
Allowances.....			-1.1	-1.1	-1.2	-1.2	-1.3
Undistributed offsetting receipts.....	-89.2	-97.3	-112.6	-122.5	-133.7	-144.0	-156.8
(On-budget).....	(-72.9)	(-76.1)	(-86.8)	(-91.4)	(-96.5)	(-100.0)	(-105.6)
(Off-budget).....	(-16.3)	(-21.2)	(-25.9)	(-31.1)	(-37.2)	(-44.0)	(-51.1)
Total outlays.....	1,142.6	1,197.2	1,233.3	1,271.4	1,321.8	1,398.0	1,476.9

Note: Details may not add to total due to rounding.

* \$50 million or less.

THE UNIVERSITY OF TENNESSEE KNOXVILLE



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UT Knoxville, with nearly 200 years of academic tradition, is Tennessee's premier institution of higher learning.

The 25,000 students at the University of Tennessee, Knoxville come from all states in the nation and approximately 100 countries. They study with outstanding faculty like anthropologist William M. Bass, the Council for Advancement and Support of Education's 1985 Professor of the Year.

Complementing curricular offerings in 300 fields of study are internationally recognized research programs and public service activities which improve the lives of Tennesseans. The University's dedication to scholarship and service is marked by a newly renovated library in the center of the campus, while a selective admissions program and expanded offerings to

honors students underscore our commitment to academic quality.

Chairs of Excellence and a Distinguished Scientist program are bringing the world's top scholars and scientists to the campus. Centers of Excellence recognize UT Knoxville's eminence in science and mathematics, business, materials science and engineering, and waste management. UT Knoxville faculty win more than \$30 million annually in research support, earning the institution a place among the nation's top 100 research universities. The University also enjoys extraordinary support for its tradition-rich "Volunteer" athletics program and for alumni and development programs that are top ranked among public universities.

Because cultural and academic diversity is vital to the growth of a

university, partnerships and exchange programs have been established with universities and institutes throughout the world—recognition of the increasingly global society in which we live. Innovative technology transfer and economic development programs are serving as models for colleges and communities throughout the nation. In the Technology Corridor between UT Knoxville and Oak Ridge National Laboratory, faculty members are conducting research and nurturing development of high tech businesses.

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Information about University of Tennessee, Knoxville programs is available from:

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Office of Alumni Affairs
1609 Melrose Avenue
University of Tennessee
Knoxville, TN 37996-3550
615-974-5432

Office of Development
1609 Melrose Avenue
University of Tennessee
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University Communications
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Knoxville, TN 37996-0340
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Office of the Chancellor
527 Andy Holt Tower
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Knoxville, TN 37996-0150
615-974-3288

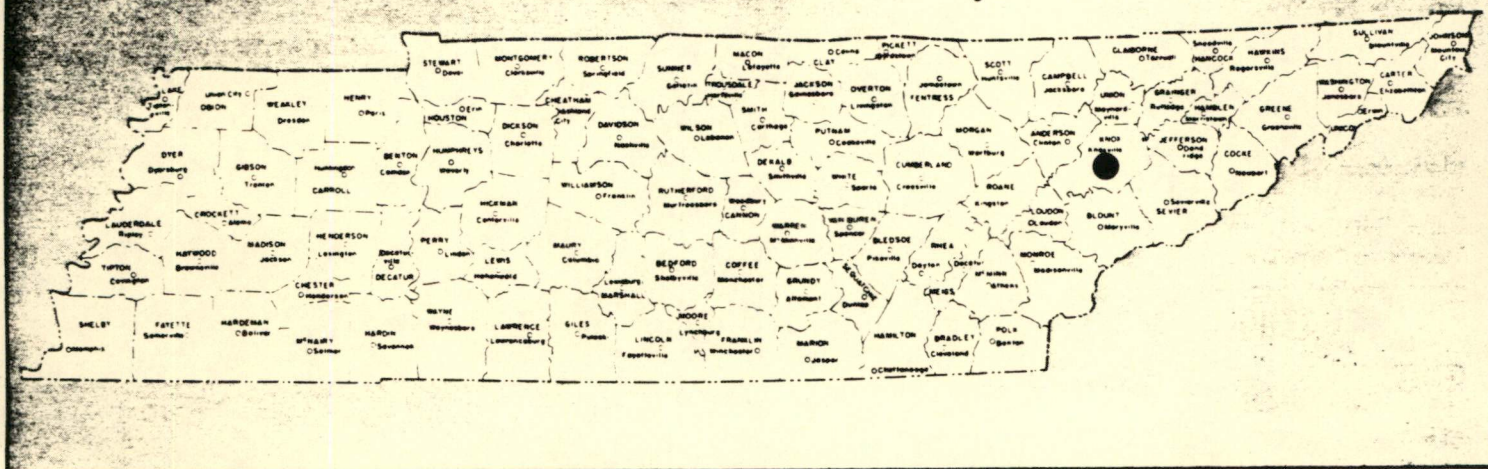
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TENNESSEE COMMUNITY DATA

KNOXVILLE, TENNESSEE

May 1989



LOCATION

Region: East
 County: Knox Sq. Miles: 528
 Distance From: (City) Atlanta Miles: 240
 Nashville 185

POPULATION

	City	County
1950	124,769	223,007
1960	111,827	250,523
1970	174,587	276,293
1980	175,045	319,694
1986 (Est.)	173,210	329,500
% Nonwhite (1980 Census)....	15.5	9.5

TAX STRUCTURE

	Local City	County
Property Tax		
Rate Per \$100 Value	\$3.24	\$2.91
Ratio of Assessment		
Residential	25%	25%
Industrial	40%	40%
Personal (Equipment)	30%	30%
(Inventory Tax) .Raw Materials Only		
Bonded Debt	\$ 217,787,533	\$ 70,275,000
Assessed Valuation	\$1,335,418,678	\$2,582,366,546
School Tax	None	None
Sales Tax	3/4%	2 1/4%
	State	
Sales Tax	5 1/2%	
Income Tax		
Personal	6% on Interest & Dividends	
Corporate (Excise)	6% of Net Earnings	
Franchise Tax	25c per \$100 of Capital Properties	
Unemployment Tax		
New Employers	2.7% of First \$7,000	

TRANSPORTATION

Railroads

Served by: CSX & Norfolk Southern
 Piggy Back Ramp: Yes
 Location Nearest Ramp: Yes Miles:

Highways

0 — Miles to Access of Interstate — 40, 75, 81
 U.S. Highways: 11, 25, 70, 129, 441, 25-W
 State Highways: 1, 2, 9, 33, 62, 71, 73, 34, 131, 162

Common Carriers

Motor Freight Companies: 62 Terminal Facilities: Yes
 Bus Service — Inter-City: Yes
 Local: Yes
 Carrier Service: Yes

Navigable Waterway

River: Tennessee Channel Depth: 9'
 Nearest Port Facility: Knoxville Miles: 0

Nearest Airport

Location: Metropolitan Knoxville, McGhee Tyson
 Runway Length: 9,000' Surface: Asphalt
 Lighting: Yes
 Gas: Yes Octane Available: 80/100
 Repair: Major
 Taxi or Car Rental: Both
 Nearest Commercial Service: At This Airport
 Airlines Serving: United, USAir, Northwest, Comair, Piedmont, American Eagle, TWA Express, Delta, Iowa Airways, Eastern Metro Express & United Express
 Daily Flights: 120 Arrivals: 60 Departures: 60

COMMUNICATIONS

Post Office Class: First

Newspapers	Frequency	Circulation
Knoxville News Sentinel	Daily	99,079
	Sunday	165,317
Knoxville Journal	Daily	43,308

Radio Stations: 8 AM, 9 FM

Television Stations	Location	Networks
5 Channels	Knoxville	ABC, CBS, NBC, PBS

1 Independent Station

Cable Television: Yes Number of Channels: 21

Telephone Company: South Central Bell

INDUSTRIAL SUPPORT SERVICES

Service	Distance	Town
Tool & Die	Local	
Heat Treating	Local	
Foundry	Local	
Heavy Hardware	Local	
Sheet Metal	Local	
Lubricants	Local	
Welding Supplies	Local	
Other:		

FINANCE

Banks: 11

Combined Assets: \$1,960,319,000

Savings & Loan Assns.: 8

Combined Assets: N/A

MUNICIPAL FACILITIES

Government (type): Mayor & Council

Policemen: 278

Cars: 320

Planning Commission: Yes

Zoning Regulations: Yes

Industrial Development Corp.: Yes

FIRE DEFENSE SYSTEM

Equipment: 93 Vehicles

Full-Time Firemen: 330

Volunteers: None

Insurance Rating: Class 3, City; Class 6-9, County

NATURAL RESOURCES

Minerals: Limestone, Zinc, Marble & Shale

Timber: Various Hardwoods, Pine & Cedar

AGRICULTURAL PRODUCTS

Crops: Beef & Dairy Cattle, Greenhouse & Nursery

COMMUNITY FACILITIES

Education

State Industrial Training Service Available: Yes

Type of Public School System: County

	Schools	Enrollment	Student/ Teacher Ratio
Elementary	55	23,951	25:1
Middle/Jr. High	17	10,917	28:1
Sr. High	15	14,468	35.4
Private &/or			
Parochial	21	4,000	13:1
Voc.-Tech.	6	8,475	33:1
Colleges	5	26,563	18:1
Libraries	18	Volumes: 643,235	

Health Care

Hospitals: 8

Beds: 3,197

Clinics: 10 Knox Co. Public Health

Beds:

Doctors: 725

Dentists: 400

Nursing Homes: 12

Beds: 1,200

Churches

Protestant: 400+

Catholic: 5

Jewish: 2

Other: Greek Orthodox

Recreation

Parks	34	
Golf Courses	8	
Swimming Pools	8	
Country Clubs	5	
Theatres	32	
Bowling Alleys	5	
Hotels & Motels	65	Total Rooms: 6,000
National Chains	Yes	
Largest Meeting Room Capacity	7,000	
Restaurants	200+	
Other:	41 Athletic & Recreation Centers, 146 Tennis Courts, 50 Ballparks, University of TN & Knoxville College, Cultural & Sporting Events, Civic Auditorium & Coliseum, Exhibition Hall & Convention Center	

CLIMATE

Annual Average Temperature: 58.9°

Monthly Average High Temp: Jan. 50° July 90°

Monthly Average Low Temp: Jan. 31° July 67°

Annual Average Precipitation: 47.29"

Annual Average Snowfall: 13"

Elevation: 936' Above Sea Level

Prevailing Winds: Southwest

Mean Length of Freeze Free Period (Days): 214

SELECTED ECONOMIC INDICATORS FOR KNOX COUNTY

Estimated County Available Labor

Date: 2/89 Total: 8,600 Male: 4,540 Female: 4,060
 Estimated Total in Surrounding Area: 16,050
 High School Graduates 1988: 3,592
 % College Bound: 55.6

Labor Force Estimates

Annual Average Employment	1988
Civilian Labor Force	163,310
Unemployment	7,650
% of Labor Force	4.7
Total Employment	155,660

Per Capita Income

Year	Amount
1987	\$14,292

Retail Sales

Year		Amount
1988	(Knox County)	\$3,790,878,000
	MSA	\$5,814,826,000

County 10-Year Growth Report

Years: 1979-1988	New Plants	Expansions
Number Projects:	18	65
Total Investments:	\$46,055,000	\$146,705,000

UTILITIES

Treated Water Suppliers

Source: Fort Loudon Lake
 Capacity: 50,000,000 GPD
 Current Consumption: 32,000,000 GPD
 Storage Capacity: 23,500,000

Water Analysis

Hardness	89	PPM
Alkalinity	68	PPM
Iron	0.11	PPM
Calcium	24.1	PPM
Turbidity	0.13	
PH	7.7	

Sewage Treatment

Type of Treatment: Advanced Secondary-Activated Sludge
Capacity: 80 mil. GPD
Current Usage: 37 mil. GPD
% City Sewer Coverage: 99.5
% Storm Sewer Coverage: 61
Solid Waste Disposals: Yes

ENERGY

Electricity

Electric Power System: Knoxville Utilities Board
Source Company: TVA
Residential Rate: RP-12
Commercial Rate: GP-12

Gas

Gas Supplier: Knoxville Utilities Board
Source Company: East Tennessee Natural Gas
BTU Content per Cubic Foot: 1,030
Fuel Oil Suppliers: 20
Suppliers of LP Gas: 7

AVAILABLE INDUSTRIAL SITES

SITE 1

Site Name: East Bridge Business Park
Controlled: Yes
Acreage: 800 Remains Available
Distance to Town: 14 Miles
Direction from Town: East
Nearest Highway: U.S. 11W/11E **Distance:** 2.4/2.5 Miles
Nearest Interstate: 40 **Distance:** 10.5 Miles
Rail Line: Norfolk-Southern
Electric Lines: On Site **Ft.** 13.2-69 K Volts
Gas: Available **Ft.** 8 In. Line
Water: On Site **Ft.** 16 In. Line
Sewer: On Site **Ft.** 8 & 10 In. Line
Core Drilling: Available
Topo Prepared: Yes
Cost per Acre: Negotiable
Cost Including Utilities: Negotiable

SITE 2

Site Name: Byington Industrial Park
Controlled: Yes
Acreage: 250 + Remains Available
Distance to Town: 7 Miles
Direction from Town: West
Nearest Highway: TN 62 **Distance:** 1 Mile
Nearest Interstate: 40, 75 **Distance:** 5 Miles
Rail Line: CSX
Electric Lines: On Site **Ft.** **Volts**
Gas: On Site **Ft.** 6 In. Line
Water: On Site **Ft.** 12 In. Line
Sewer: On Site **Ft.** 12 In. Line
Core Drilling: No
Topo Prepared: Yes
Cost per Acre: Negotiable
Cost Including Utilities: Yes

LOCAL INDUSTRY

Employment

Firm Name	Product	Total	Male	Female	Union Affiliation
Allied Automotive (Bendix Safety)	Metal Stampings	432	N/A	N/A	UTWA
Alpha Industries	Military Apparel	375	N/A	N/A	None
Atlantic Soft Drink Co. (2 Plants)	Bottled & Canned Soft Drinks	206	N/A	N/A	None
BIKE Athletic	Athletic Equipment/Sportswear	541	N/A	N/A	ACTWU
Briggs	Steel Bathtubs, Sinks	183	N/A	N/A	SMW
Carrier Corporation	Electric Heat Units, Air Conditions & Humidifiers	454	N/A	N/A	SMW
Computer Technology & Imaging	E Cat Scans	140	N/A	N/A	N/A
Container Corporation of America	Corrugated Shipping Containers	120	N/A	N/A	UPIU
Dana Corp./Spicer Transmission	Transmissions	150	N/A	N/A	N/A
Delta Apparel	Knitwear	800	N/A	N/A	None
DeRoyal Industries	Medical Devices	800	N/A	N/A	None
Florida Steel	Concrete Reinforcing Bar, Plain Rounds	500	N/A	N/A	None
Hastings Manufacturing	Replacement Auto Parts	150	N/A	N/A	None
Kern's, Incorporated	Bakery Products	370	N/A	N/A	None
Lay Packing	Meat Packing	325	N/A	N/A	None
Levi Strauss (2 Plants)	Clothing	2,600	N/A	N/A	UGW
Matushita Electric Components	Electric Components	250	N/A	N/A	None
Modine Manufacturing	Air & Oil Coolers	84	N/A	N/A	SMW
Normak International Incorporated	Men's/Ladies Clothing	285	N/A	N/A	None
Palm Beach	Clothing	900	N/A	N/A	ACTWU
Perceptics Corporation	Computer Hardware/Software	60	N/A	N/A	None
Plasma Alliance	Plasma Products	300	N/A	N/A	None
Plasti-Line, Incorporated	Plastic Signs	550	N/A	N/A	SMW
Phyton Technologies	Plant Tissue Culture Laboratory	30	N/A	N/A	None
Philips Consumer Electronics Corp.	Color TV, TV Cabinets, Stereo Cabinets	653	N/A	N/A	None
Robertshaw Controls	Temperature Controls	1,132	N/A	N/A	USW-IAM
Rohm & Haas-Tennessee	Plexiglass	325	N/A	N/A	ABGW
Rotocast	Kayaks	30	N/A	N/A	None
Roddy Manufacturing Company	Carbonated Beverages	350	N/A	N/A	None
Sea Ray Boats	Boats, Fiberglass	800	N/A	N/A	None
Silver Furniture Company, Inc.	Wood Furniture	200	N/A	N/A	USW
Swift Eckrich	Processed Poultry	326	N/A	N/A	N/A
Tennessee Tube Bending	Metal Piping	26	N/A	N/A	None
Thundercraft Boats	Fiberglass Boats	95	N/A	N/A	N/A
Toms Foods	Potato & Corn Chips	260	N/A	N/A	None
TRW, Carr Division	Electronic Relays	230	N/A	N/A	OCAW
Vynilex Corporation	Extruded Plastics	185	N/A	N/A	None
Volunteer Apparel	Warm-up Suits	170	N/A	N/A	None
Whittle Communications	Publishers	600	N/A	N/A	None
LARGE EMPLOYERS (Non-Manufacturers)					
The University of Tennessee-Knoxville		6,238	N/A	N/A	None
Tennessee Valley Authority-Knoxville		3,072	N/A	N/A	N/A

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 Nashville, Tennessee 37219
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THE newly renovated John C. Hodges Library is designed to serve the research and instruction needs of UT Knoxville's faculty and students well into the 21st century. The library is named in honor of John C. Hodges, professor of English at UTK for more than 40 years and author of the *Harbrace College Handbook*. With 350,000 square feet, the six-story library is the largest library building in Tennessee. Equipped with state-of-the-art computer and audio-visual technology, it will hold more than 2 million volumes and seat 4,000 persons. Tours are available through the library's User Education Office (974-4273).

Bob

- Hugh Nichols (Call, get fax)

~~XXXXXXXXXXXX~~

- Sports: 974-1212 Bud Ford 974-1212

- details on FB, both B-ball teams

⊗ → - great, historic moments (inspiring)
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men's 10-7 tied to conf. lead Wed. home Vanderbilt

women's 15-4 play Sat. #3

- Shuttle astronaut? details...

BA - U.C. UT College of Med. M.D. 1973

NC - UT

programs part of space program

↓ STS-SID 4/12/85

2 satellite

jobs what I wanted to see is?

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Pat Summit

Blue tick corn hound Smokey

Dick Roberts

UT Space Inst. 615-455-0631 x 319

To ED

Date 1/10 Time 4:45

WHILE YOU WERE OUT

M Hugh Nichols

of Enteregy

Phone 504/569-4720

Area Code	Number	Extension
TELEPHONED	<input checked="" type="checkbox"/>	PLEASE CALL <input checked="" type="checkbox"/>
CALLED TO SEE YOU	<input type="checkbox"/>	WILL CALL AGAIN <input type="checkbox"/>
WANTS TO SEE YOU	<input type="checkbox"/>	URGENT <input type="checkbox"/>

RETURNED YOUR CALL

Message RE: info on educational programs

- Electric utility holding company.

Operator

AMPAD EFFICIENCY®

Waldorf - Astoria

23-020

Bob

(Call, get fax)

Maple Michael

~~Maple Michael~~

Spots: Bud Ford 074-1212

details on FB, Holt B. Holt

10-7 kid in and... 12-4... 10-7...

UT class of... M.D. 1975

program part of space program

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Gen. Robert

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36-40
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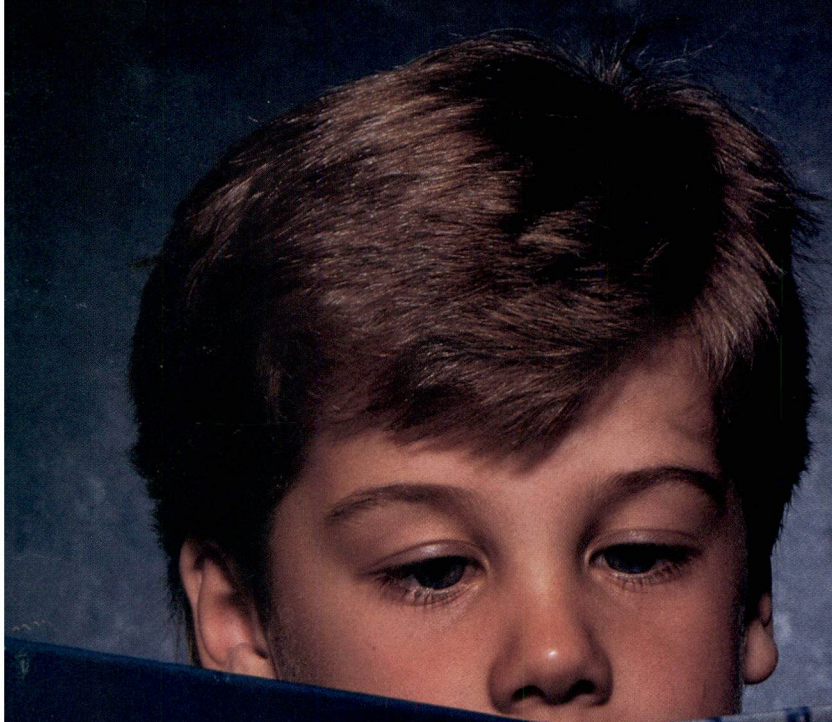
used to use team away jerseys
game movies
prior to 1926, first team to use 6-man front
fake pass

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.....

In the Volunteer Spirit



Student photographer Robert Cathey captured some smiling faces and high spirits when three friends

posed for him on a recent graduation day at UTK.

Eddie Sherwood, Kim Patterson, and David Richards are among the hundreds of students who commemorate graduation by having their pictures made with the Volunteer Statue, although most don't go to the trouble to "costume" the statue for the event.

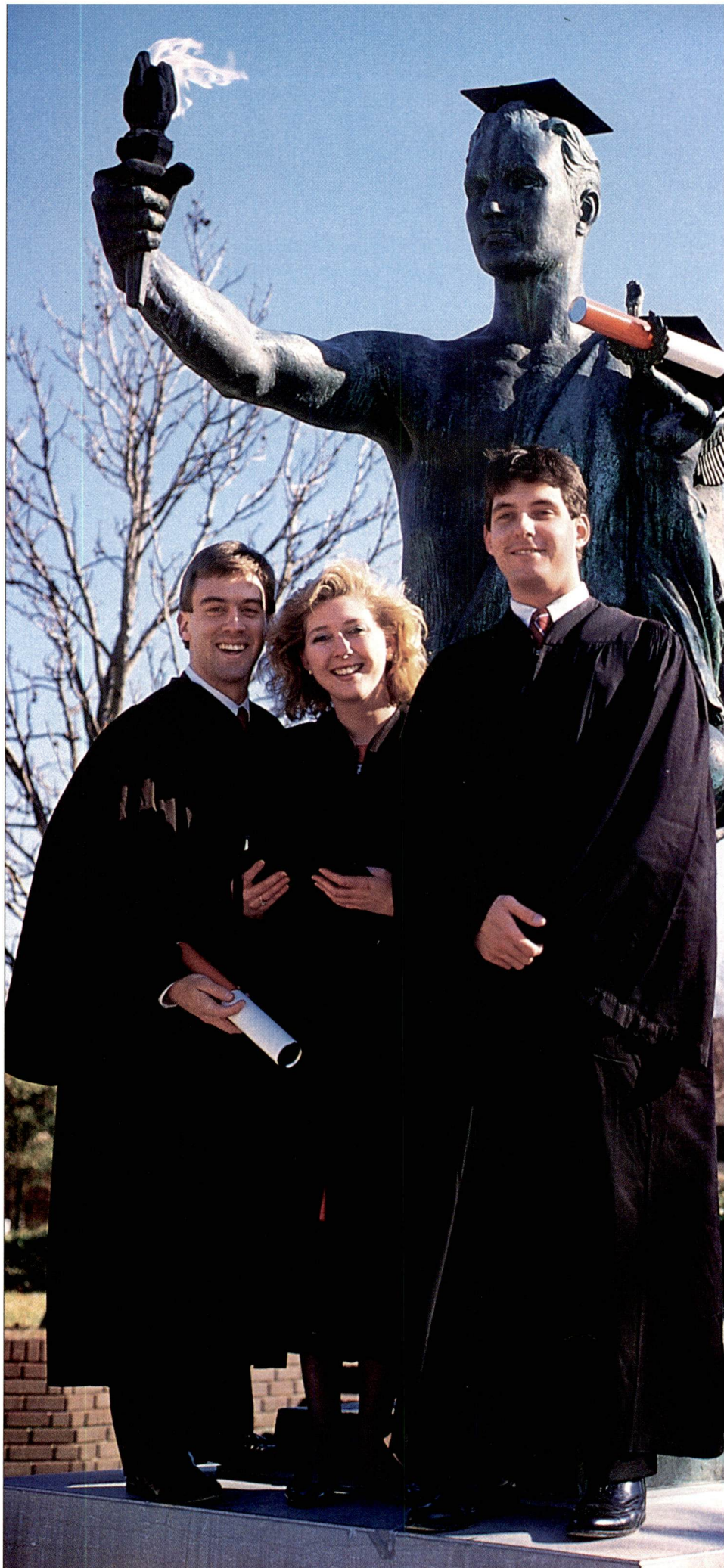
The Volunteer has been part of the campus since 1968, and the Volunteer symbol dates back to 1931. Thousands of students pass the statue every day, but it takes on special meaning when graduation brings to a close one's student days.

Cathey shared his picture with the *Tennessee Alumnus*, hoping it would awaken some memories among alumni.

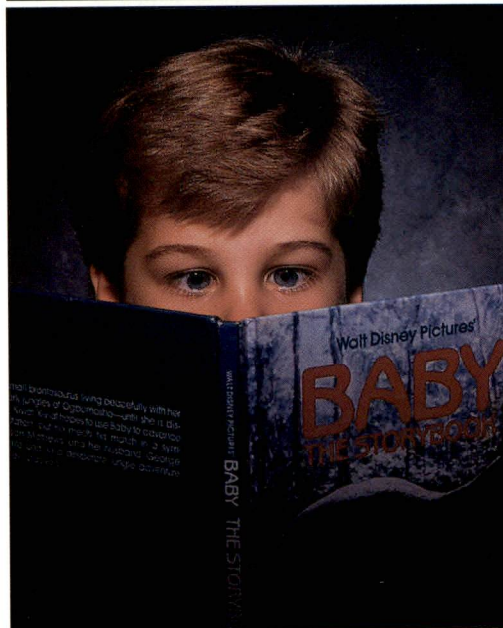
"The idea I had in mind is that these three students have just graduated and are facing the same feelings and emotions that almost every other young graduate of UTK has felt," Cathey says.

"Readers might be interested in seeing that things really haven't changed that much since they attended school. Students still care about their University and how they represent it when they leave." □

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ALUMNUS



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Cover photograph and above by Don Dudenbostel.

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Published by The University of Tennessee for alumni of all its campuses: Knoxville/Memphis/Martin/Chattanooga
Editor/Diane Ballard '69
Production Editor/Tammy Pickens Designer/Ted Williams '55

The Tennessee Alumnus (USPS 538-840, ISSN 0162-2587), established in 1917, is published quarterly for the University of Tennessee National Alumni Association and distributed free to contributors to the Annual Giving Program. Editorial offices are in the Office of University Relations, 467 Communications Building, UT, Knoxville 37996. Member, Council for Advancement and Support of Education. E17-0425-002-89

TOMORROW'S MEDICINE

By JOYCE YORK

Patient care takes giant steps thanks to new technology.

Powerful magnets, radio waves, and radioactive isotopes may sound like ingredients in a nuclear cocktail. Actually, they help University researchers detect disease and injury earlier and more accurately than previously possible.

It's happening at the Biomedical Imaging Center, part of the UT Medical Center in Knoxville. There, physicians, scientists, and private industrial partners use magnetic resonance imaging (MRI) and positron emission tomography (PET) to help real people. They say UT's is the first center in the world to use the combined MRI and PET technologies for patient care.

Their research brings tomorrow's medicine to the bedside of today's patient.

Its founders say BIC is a natural outgrowth of the medical center's collaboration with Oak Ridge National Laboratory, UT Knoxville, and area high technology companies. These joint research relationships support a rich collection of scientific expertise and technical resources in medical imaging.

"Our goal is to shorten the time between technological discovery and medical care delivery by establishing close cooperation between basic researchers and health care providers," says Dr. Edward Buonocore, BIC director. "Through collaborative efforts — using the modern facilities of the University Medical Center and UT Knoxville and the superb resources of East Tennessee — these investigators are committed to providing advanced medical care to patients."

Scientists and educators must work closely together to explore the

complexities of the human body and the intricacies of the latest medical technology. Dr. George Kabalka, BIC's basic science research director, says the future of medical care will require "cooperation between practicing physicians and basic scientists."

Two 10-ton MRI scanners, a PET scanner and cyclotron, CAT scanners, and conventional X-ray equipment constitute the center's high tech hardware. Chemists, engineers, pharmacists, computer scientists, and physicians use the facilities, which include clinical units for patient exams, research facilities, self-sufficient electronic labs, and computer rooms.

In addition to conventional medical technology, BIC research uses two of the most exciting developments in science today: computer science and biotechnology. Scientists and clinicians study ways to extend imaging technology's accuracy and scope to the

diagnosis of disease, injury, and malfunctions within the body.

"BIC represents methods of seeing life, disease, and all the things that go wrong right down to the cellular level — even to chemistry beyond the cell," Dr. Buonocore says. "We hope to achieve a better understanding of disease and how we can treat it."



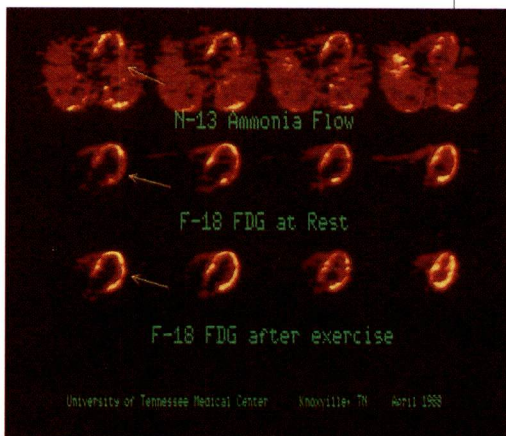
Positron emission tomography (PET) is the newest and most sensitive imaging technology available to help physicians diagnose disease and dysfunction within the body. Using advanced computer technology, PET lets physicians actually "see" the body's chemical processes and study organs in a way no other imaging technique allows.

PET scanners use radioisotopes or "tracers" to track chemical functions within the body. These tracers attach to compounds such as glucose that are found in the body.

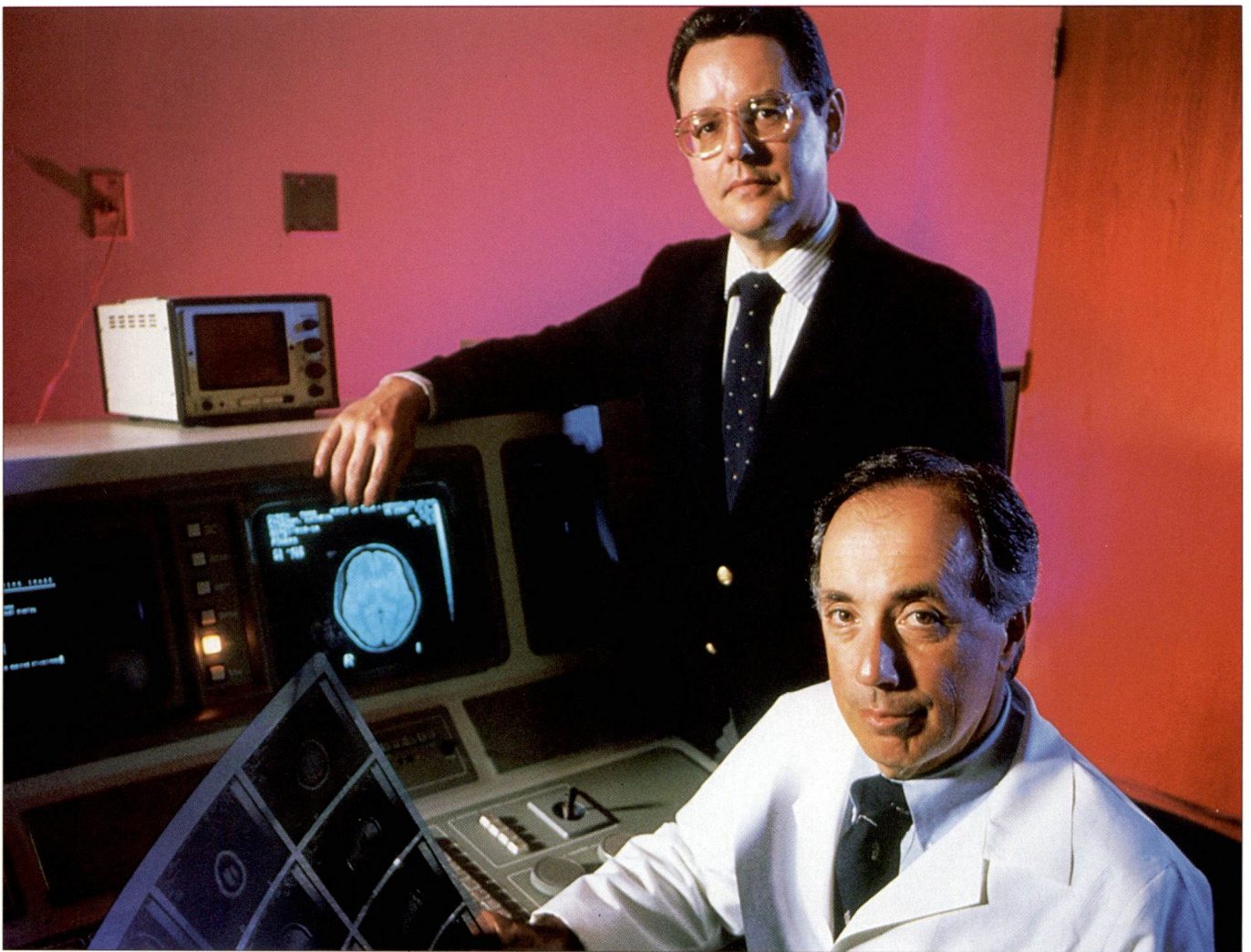
Physicians can then study metabolic rates, blood flow and volume, and other organ functions.

"PET is an entirely different imaging procedure that allows you to look at the chemistry of the body, the organs, without having to take any samples out of the body or cut into the body," says Dr. Karl Hubner, nuclear medicine director. "It's noninvasive. PET is especially useful in brain diseases, myocardial heart disease, and cancer."

Until recently, PET was used mostly for research; University Medical Center pioneered its use in a clinical setting. Physicians have



This PET study reveals a damaged but repairable heart muscle. Before PET, this type of information wasn't available to physicians.



Dr. George Kabalka, at back, and Dr. Edward Buonocore of the Biomedical Imaging Center

found PET to be very useful in imaging the heart and brain. Major clinical uses of PET are diagnosing patients with coronary artery disease and congestive heart failure. It's also good for studying the heart's viability in prospective bypass candidates.

PET helps diagnose and grade the severity of cardiac diseases, cancer, and neurological diseases such as epilepsy, strokes, and Alzheimer's and Parkinson's diseases. The technology also has the potential to detect warning signs of disease before symptoms begin.



Magnetic resonance imaging (MRI) is also an integral part of the center's diagnostic and clinical arsenal.

The MRI scanner reveals detailed, three-dimensional pictures of

the heart, brain, spinal cord interior, and other soft tissues using magnets thousands of times stronger than the earth's magnetic field. It's different from conventional X-rays, which detect more dense structures like bones, or CAT scans, which show three-dimensional "slices" of organs using radiation.

An MRI patient enters a cylinder surrounded by magnets that cause the patient's hydrogen atoms to literally "stand up." Radio waves interrogate the body's chemistry and create a magnetic field that causes these atoms to temporarily tilt over. Sophisticated computers reconstruct and measure the relaxation time and amount of tilt, then transform the data into a detailed, three-dimensional image much like a photograph.

University Medical Center is one of only a few institutions in the world to feature multinuclear magnetic resonance capabilities. University researchers were the first team to image boron (a metalloid

element found in nature only in combination with other elements) in a MRI unit, then pioneered the use of boron magnetic resonance to locate tumors.



University researchers have unequalled technological capabilities. MRI gives a structural and biochemical picture of the body, while PET provides a chemical composition. Together, they offer the most accurate indication of the human body's interworkings available today. And Dr. Buonocore says the new technologies brim with potential.

"MRI and PET may ultimately lead to prevention of diseases through a better understanding of how they begin," he says. □

Joyce York is on the community relations staff at the UT Medical Center in Knoxville.

Photographs by Don Dudenbostel



LET THEM EAT (MICROWAVED) CAKE

Then have them tell how they liked it.

By DIANE BALLARD

If someone tells you all your taste is in your mouth, you probably should be offended. But, if it's true, you might be supremely qualified to work in UT's Sensory Evaluation Lab.

Actually, the people who test and taste foods in the lab on the ag campus at Knoxville aren't tasteless oafs. They are on panels that sample foods and evaluate them to identify what's good and bad and what can be done to make them better. They analyze foods for taste, appearance, odor, and texture.

Deciding how best to describe the properties of a food is the first step some sensory evaluation panels take, says Dr. Marjorie Penfield, professor in the Department of Food Technology and Science.

"Groups meet and define their terms," she says. "They keep at it until they understand and agree upon the definitions."

For example, in a project on the sensory evaluation of microwaved cakes, panelists decided to rate the cakes on 36 different qualities. One was "springiness." The group agreed on the term, set the boundaries as "no recovery" to "complete," and

established how to evaluate the characteristic — "press down a 2-centimeter piece 1 centimeter with a fork, hold for 1 second and score recovery after 2 seconds." Other characteristics included degree of softness (effort required to bite through a 1 centimeter piece), compactness, moistness, smoothness, ease of chewing and swallowing, and adhesion to teeth.

Why go to so much trouble and detail? In some cases, it's for research purposes within the food technology and science department and, in other instances, private concerns fund the testing. One recent study was done for a distillery that wanted to find profitable uses for distiller's dried grain, a plentiful byproduct from the manufacture of liquor.

"Distiller's dried grain has a high fiber and protein content," Dr. Penfield says. "We looked at baked products to which it could be added. Since the product is derived from corn, we first thought it would be good to use in corn-based products, but that didn't go well."

"We discovered it was better in sweet or spicy products such as doughnuts and spice cookies. It also works well in yeast bread."

"We actually developed laboratory formulas for certain products that the distiller can use to help develop a market for the grain."

Photograph by Don Dudenbostel

It's best to be cautious when interpreting the results of sensory evaluations.

Despite efforts to be objective, panelists' opinions vary.

Another recent study for a national dairy organization was of rancid flavored milk.

"A graduate student trained eight other students to recognize rancid flavors in milk. The panel met three to four times a week until they were able to recognize the rancid flavor. Then they came to the lab two times a week to evaluate the intensity of the rancid note in milk samples.

"They don't swallow the milk," she added.

When panelists are at work, it's all business. They don't sit around a big table and chat while they sample. They are closed in a tasting room, and each person is in a separate booth. The food samples are served through individual hatches, so the server isn't seen. The lighting can be varied depending on the foods being tested. Small samples are served.

"If you're asking panelists to test foods for flavor, you might ask them not to eat for 45 minutes to an hour before," Dr. Penfield says. "Sometimes you have them rinse their mouths between tastings. What's

important is consistency — if one rinses, they all must rinse. And we don't always use just water. Apple slices and crackers are good for rinsing, too, especially when we're testing products that have a strong flavor or leave a fatty coating in the mouth."

Dr. Penfield says it's best to be cautious when interpreting the results of sensory evaluations. Despite efforts to be objective, panelists' opinions may vary for numerous reasons.

"One problem is a psychological error in judgment called a contrast error. If panelists are served a good product and then a bad product, they'll rate the bad product lower than if they had sampled it alone. The same is true if they're served the bad product first and then the good one. They'll rate the good product higher than if it was served alone.

"To minimize this problem when we're evaluating two samples, we serve half the judges one product first, and the other half get the other product first. Then the contrasts balance out."

After laboratory panels have tested foods, they are tried out on consumer panels — larger groups that sample the foods under unscientific conditions and tell how they like them on simple, printed forms.

One form uses variations of the well-known "smiley face." Under a question that asks for the overall impression of a new type of cookie are five faces, ranging from full frown to full smile. A person can mark the face that best reflects his or her opinion.

"Consumer panels enable you to double check what you've shown with your lab panels," Dr. Penfield says.

"You can do lots of tests in the lab, but what you find when you get out in real practice may be entirely different."

The boundaries of the sensory lab sometimes expand to get the

number and kind of panelists needed for a particular project. Graduate students went to Greenville, South Carolina, to find out if customers in a restaurant there liked shrimp and french fries fried in various oils.

"They went to Greenville because a restaurant there agreed to use the different kinds of oils," Dr. Penfield says. "The customers were asked to rate the products, and the restaurant gave incentive coupons."

After the tasting and testing is through, the findings become cold, hard statistics.

"Some of my students cringe when they find out that a big part of sensory evaluation is statistics," Dr. Penfield says. But from statistical data can emerge graphics that show at a glance the results of lengthy, detailed studies.

"This is a trend in our field to show graphically how a product rates," Dr. Penfield says. "We can make a picture of our findings."

Sensory evaluation is a "hot" area. It's not limited just to foods, but also is important in evaluating odors of home care products such as air fresheners and cleansers and personal products like deodorant. Sensory evaluation plays a major role in research and product development as well as quality control, and many major companies have their own sensory labs.

"We're now offering a course to meet the demand for students who've had some training in this area," Dr. Penfield said. "There's a trend toward recognizing the need for sensory evaluation, and the demand for people trained in the area is high."

Do students balk at testing such samples as rancid milk or sweet potato yogurt?

No, says Dr. Penfield.

"Graduate students twist each other's arms. They know they better help their friends with their research projects because they'll need help, too, on down the line." □

WALK, DON'T RUN

By NEAL O'STEEN

India to Egypt, Shanghai to Shangri-La, Horace Holmes has taught and practiced the basics of farming.

On the wall of the study at his Florida home, Horace Holmes (UTK '30), expert on the agricultural development of Third World countries, has a framed copy of "Holmes Law." It reads:

"The most important step that a government can take to promote development is to stop doing the things that prevent it."

Put in other words, Holmes might have said: "You don't teach a child to run before it can walk — so why overwhelm Third World farmers with scientific knowledge and highly technical tools before they master basic farming practices, using simple tools at hand?"

In his two decades of agricultural work in foreign fields, Holmes observed that governments tend to pour excessive amounts of expensive tools and scientific knowledge into projects intended to help farmers, all of which can hinder progress. His personal policy was to offer Third World farmers what they could understand and use, mainly within their own resources and in a way that met their own interests.

Modest beginnings, however, must be followed by the educational process practiced by the agricultural extension system familiar to American farmers. "There must be a continuing source of scientific information that these farmers can use," Holmes said. "And it has to be offered by people the farmers can trust. They've seen too many medicine men and heard too many speeches."

And the gulf between government and farmer must be bridged without "a show of power," according to Holmes. He tells of countries where it is common for the agricultural adviser to visit his rural charges wearing a pistol.

Today, at age 80, Horace Holmes has plenty of time to reflect upon his career as a widely traveled

enunciated by Harry Truman in 1949 and continued today in the work of the Agency for International Development as well as other agencies, foundations, and universities. He dug his hands into the soil of countries around the world, beginning with civil war-torn China of the late 1940s and on through India, Pakistan, Thailand, and

Egypt, to name a few. His last foreign post before retiring in 1968 was with the U.S. embassy in Bangkok, the regional American aid office for Southeast Asia. For two years he promoted agricultural development in Thailand, Laos, the Philippines, Korea, and Indonesia. He was with Agricultural Secretary Orville Freeman's mission to Vietnam in the mid-1960s.

In many parts of the world, among farmers and government officials, his name became a household word. Plaudits came from dignitaries and from those who worked the earth. For one, Dr. Raymond Miller of the Harvard Graduate School of Business and consultant to the United Nations Food and Agriculture Organization in 1932 praised Holmes for teaching farmers in India "the methods he used to teach farmers in the South."

A *Washington Post* editorial that same year called Holmes "one of this country's most resourceful and successful technical experts abroad," pointing specifically to his efforts to establish India's extension program. A 1950 *New York Times* article described the Holmes method as



A young Horace Holmes discusses agricultural practices on one of his many missions abroad. He was famous for his technical knowledge and his success at dealing with farmers in developing nations.

"county agent" while helping his son David develop their 70-acre orange grove in central Florida — his private "Shangri-La" shared with his wife of 50 years.

From the 1940s into the 1960s, Holmes applied his "shirt-sleeves" farming methods to the aims and goals of the Point Four Program,

simply identifying farm problems, one by one, and helping people solve them with their own hands and without too much government interference and with some practical government assistance.

For his work with farmers in India, Eleanor Roosevelt called Holmes the "greatest promoter of international understanding" in that country.

The *New York Times Magazine* of March 23, 1952, featured Holmes and the results achieved in India. A 1951 special issue of *Life* featuring "Asia: Its Troubles and Opportunities," included an article entitled "A County Agent Comes to India," referring to the Holmes record there.

Perhaps his approach was best summarized by a brief mention of his work in the Science section of *Time* magazine: "In any of the foreign countries we are apt to make the mistake of attempting to Americanize the people. They do not necessarily want to be Americans, nor do they need to be." In this context, Holmes believes "you have to start with people where they are, not where you think they should be."

Holmes' work also drew praise from President Truman. In the fall of 1951 Truman wanted to hear from someone who had been working with the Point Four Program in India, and Holmes was summoned to Washington. The president lauded the UT alumnus for the "marvelous results" being realized in India. While in the United States, Holmes testified before the House Foreign Affairs Committee on the program's achievements and budget needs; and he spoke on the program's prospects in India before a New York *Herald Tribune* forum.

The effort grew out of the "fourth point" in Truman's 1949 inaugural address. He called for "a bold new program for making the benefits of our scientific advances and industrial progress available for the improvement and growth of underdeveloped areas."

When called back to Washington, Holmes had been working for a year as deputy director and chief agricultural officer of the Point Four Program in India. Prior to joining

the Point Four agency, he had been agricultural development adviser to the Indian government for two years, during which time he had helped to develop the Etawah Project, a special farming program in northern India near New Delhi. This project had become a model for the Point Four efforts in that country. By introducing better varieties of wheat and potatoes, using simple tools, and using animal wastes for fertilizer, Holmes and his associates had boosted wheat production by 63 percent and potato yield by 112 percent.

In referring to the project, Paul Hoffman, president of the Ford Foundation, for which Holmes later worked, said, "At Etawah Mr. Holmes has demonstrated that a very few dollars can help a large number of earnest Indians to help themselves to a better life."

We even got Nehru out with a shovel.

Holmes' "shirt-sleeves county agent" approach to farming needs in distant lands was grounded in some dozen years with the University of Tennessee's agricultural extension program. After finishing the bachelor's degree in agriculture at Knoxville in 1930, he became an assistant farm management specialist at Jackson, in his native West Tennessee. There he came under the tutelage of Herbert S. Nichols, who helped to frame the Holmes philosophy. Holmes moved to the extension office at Knoxville in 1935, where C.E. Brehm, later UT president, was director.

Holmes was born in Hardeman County, Tennessee, in 1908, the son of a farmer-merchant. Ambitious and independent, he was determined to go to college. And when his father suffered a severe financial setback — the family's country store was robbed and burned one night — he took his \$50 savings and headed for Knoxville. He recalls paying \$13.44 for a train ticket from Grand Junction to Knoxville, where he enrolled at UT in Sep-

tember 1926.

While studying agricultural economics and education, Horace paid the bills by holding various part-time jobs. For a time he arose at 4 a.m. to deliver newspapers, returning in time for an 8 o'clock class. He made \$10 a month as a laboratory assistant for a spell. He waited tables and sold shoes. He tried selling cemetery lots.

Retired UT agricultural dean N.D. Peacock — Holmes' favorite professor while in school — today remembers Horace as "a leader among students." Now living in Knoxville, the 93-year-old former dean said he has followed his pupil's long career abroad; and he referred to Holmes' "enviable reputation in India."

"I was always glad to have him in one of my courses, because he improved class morale," Peacock recalled.

While in West Tennessee, Holmes served as a judge in the *Memphis Commercial Appeal's* annual "Plant to Prosper" contest from 1939 to 1943. He wrote several extension publications dealing with agricultural economics and farm management. He devised a system of farm budgeting and farm leasing used widely throughout Tennessee, North Carolina, and other southern states.

Holmes took time out from his job to study at Cornell University, where he earned a master's degree in 1938. The next year he married the former Eveline Savage of Bolivar, Tennessee, a widow with a small son. Holmes had three sons of his own by a former marriage — Horace, David, and Dick. Eveline would share in his world travels in later years.

Holmes entered World War II on the home front. In 1942 he wrote "A Farmer's Wartime Creed," which was printed in several farm publications, calling for farmers to produce enough for their own families and animals and for the armed forces and war industry workers. "Save everything and waste nothing" was the watchword in this call for efficient farming.

In 1943 Holmes left Tennessee to become a farm management specialist at North Carolina State

University. Throughout 1945 he was regional chief of farm management for the U.S. Agriculture Department's Farm Security Administration in Raleigh, making loans to low-income farmers.

The Holmes horizon broadened dramatically in 1946, the year he first ventured abroad. He would not return to the United States to settle down for any length of time until he retired 20 years later.

"Thomas Costain got us off to China," Holmes recalls, referring to Costain's popular novel, *The Black Rose*, and its graphic scenes of 13th century China. The book had made a deep impression on Eveline. When approached in 1946 about a job with the United Nations' rehabilitation program in war-torn China, Holmes was reluctant to leave his homeland.

"We had gone back to West Tennessee, hopefully to buy a farm there," he explains. "Then came the chance to go to China. I said I didn't want to go, but Eveline did. I think Tommy Costain's ghost was working with her!"

Holmes went to Washington, where he was named agricultural officer for the UN program in Kiangau Province. Eveline was disappointed to learn that she might not be allowed to join Horace in that volatile environment.

"China was rough," he said. "Living conditions were terrible. I knew I couldn't bring Eveline there, so I cabled her not to come. She ignored the cable and came anyway. I'm glad she did."

Determined to see the country Thomas Costain had described so vividly, Eveline found a job of her own in China. While her husband worked to ease the plight of rural families, she managed the UN hostel at Chinkiang, where they were stationed. Later she was placed on the UN staff, and her outstanding service was recognized by a special citation.

Horace's work was in a rich farming region upriver from Shanghai. For almost two years he tried to restore stability to an agricultural economy plagued by graft and corruption and beset by a civil war.

"It was almost impossible to get anything done," he recalls. For example, a man in Indiana planned to send some purebred jersey heifers to upgrade their animals. I tried to find a place for them; but instead of going to the people they were going to the politicians. Chiang Kai-shek was to get two or three hundred of them for his wife's orphanage. We



Eveline and Horace Holmes' Florida home abounds with souvenirs of their years abroad.

had trouble finding the orphanage. My assistant finally found the place. Only there were no orphans."

As the communist army gained ground, the situation at the UN project headquarters grew more tense.

"We knew we would have to get out," Holmes said, "but we didn't know when. We had a thirty-foot fishing boat, and I had two barrels of diesel fuel saved, in case they blew up the railroad and we had to go downriver.

"We were closing up the office, giving things to hospitals and the

Nationalist government, when I found the two drums of oil were gone. Mr. Chen, our office manager, had sold them!"

Horace and Eveline made their way by train to Shanghai, where they picked up Eveline's small son Barry at the American School.

"We had passage on a freighter and had gotten Barry settled on the ship," Horace said. "We went back to the hotel for a farewell party prior to boarding at 11 p.m."

On the way to the ship they were attacked by three thugs demanding money.

"They knocked my hat off, grabbed my watch — and I grabbed Eveline and ran. We passed some policemen, but they didn't raise a hand. We managed to get on board safely.

"It's an awful thing to see a country fall apart. We were saddened to leave loyal servants and Chinese friends, who were helpless and for whom we could do no more."

His experience in China showed Holmes an inherent weakness in any agency's efforts to help other countries.

"They can put people in a country to help," he said, "but until the country's government is willing to meet the needs of

its people — or can be made to see the needs — no amount of help, no number of specialists, no amount of money will do it. It's a waste and an exercise in futility."

After leaving China in December 1947, Holmes soon found his services in demand in another country. Two months later he was on a team of specialists hired by the government in India. That country had gained a measure of independence from Great Britain in August that year, and Indian administrators, mostly British trained, saw a need to help people improve their living standard.

Holmes, the only agricultural adviser on the team, saw in India some of the problems that had

plagued China and turned it toward communism. In retrospect, he says, "I am pretty well convinced that if we hadn't gotten something going in India when we did, the country would have gone communist." However, the British had laid a foundation in India that China lacked. "They had a good system of courts, and they had a banking system and transportation system that worked. And they had some responsible and dedicated leaders."

His efforts as agronomist and extension adviser to the Etawah rural development project quickly set the standard for agricultural developers in India. Besides earning the praise of American leaders, Holmes was lauded by Prime Minister Nehru for reorienting Indian farmers.

Helping India's rural families to help themselves was not always easy. Tact and ingenuity were needed to overcome some farmers' deep-grained resistance. "In introducing soil-enriching legumes, for instance, we had to find a variety the sacred cattle didn't like," Holmes said. "No Hindu farmer will stop these cows from eating his crops."

Other obstacles had to be overcome, such as the chasm that lay between government agricultural scientists and the Indian farmer.

"There were many good Indian scientists, but most had no practical experience," he said. "As they belonged to the upper class, they wouldn't be caught dead with a hoe in their hands! They had specialists in centers where they could be available to the villagers, but the villagers couldn't digest their instructions — dozens of scientists trying to tell this fellow who couldn't even read or write what to do! It was confusing and useless.

"We tried to develop communication from the government to the villagers in ways they could understand and respond to."

Holmes set an example for both the scientists and villagers with his "shirt-sleeves" approach to farming. Eventually some of the local agricultural leaders saw the effectiveness of his methods.

"We even got Nehru out with a shovel," he said. "Of course he

didn't shovel much dirt, but at least we got him to show that it wasn't degrading to get your hands into the soil."

With regard to the Etawah project, Holmes said, "We brought in a minimum of machinery and equipment because they couldn't afford it and really didn't need it. It wasn't a question of labor, which was plentiful, but a question of utilizing their other resources."

A farm implement that did prove useful was the moldboard turning plow. "The advantage of the moldboard plow is that you can turn under organic material," he said. "The Indians' little plow couldn't get organic matter into the soil."

Holmes praised American land-grant universities' efforts to develop sound agricultural programs in Indian colleges during the post-war era. UT was one of six major land-grant

Holmes still believes there are too many "Ugly Americans" trying to help underdeveloped countries.

universities to join the Point Four effort in India's behalf. The Indian contract was signed in March 1956, and for the next 16 years UT sent agricultural and home economics faculty and staff members to India to help increase crop yields, strengthen extension programs, and improve teaching in the agricultural schools. A major objective of the UT-India project was attained in 1964 with the establishment of a new University of Agricultural Sciences at Bangalore.

"The land-grant colleges did more than simply strengthen the universities," Holmes said. "They also selected qualified Indian students to study at their campuses in the United States. They chose students who could return to India and help solve rather than compound their problems."

During the 16-year UT-India contract, 130 Indian students enrolled at the University.

After two years with the Indian government, Holmes joined the Point Four Program staff in that country. He spent three years there with the American technical assistance program before moving to a private assistance agency. The Ford Foundation was one of several non-governmental agencies then contributing to the development of Third World countries. From late 1953 until the summer of 1956, Holmes worked with rural development projects in several Asian countries, including India, Indonesia, Burma, and Pakistan.

During this period Holmes bought a home in Connecticut, where Eveline remained while their sons were in school. Horace resigned in August 1956, determined to settle down in his own country and start his own business.

"I had worked myself out of a job," he reflected. "I had joined the Ford Foundation as a troubleshooter, and I had been going back and forth to these various countries. When the need for the work I was doing in the field diminished, I was left with no specific assignment, and I was unhappy with it."

By late 1956 their four sons had finished school, and Horace and Eveline looked southward for a permanent home.

"Our place in Connecticut was too large for two people, and there was no point in me taking trips abroad and leaving Eveline to rattle around in that house," he said. "We decided to come to Florida."

There, at Lake Florinda — their "Shangri-La" — they began the orange grove that has occupied much of their attention ever since.

"We got this grove going, but I would take on assignments when I could," Holmes said.

In fact, he worked as a global troubleshooter for another dozen years. He finally retired in 1968 at age 60.

One troubleshooting venture took him to Egypt in 1960. This contract was with the Egyptian-American Rural Improvement Project, a land reclamation undertaking that had been interrupted by the 1956 Suez Crisis.

"A California engineer was supposed to go, but he couldn't — so

they asked me to see what could be done until he could go, which would be at least six months," Holmes said. "I had met some of the Egyptian agricultural leaders at a conference in India, so I had that advantage."

The Suez fighting had left the country in turmoil. Egypt's extensive reclamation program was paralyzed, and the Russians were seeking a foothold in the country, mainly through construction of the Aswan High Dam.

"The place was full of Russians," Holmes recalled, "but anti-Russian sentiment was strong among many Egyptians. We made friends with the Egyptians, and in time we got the project revived."

The project with which Holmes was most closely concerned was in the Fayyum Depression, an ancient lake that had dried up, leaving a salty basin. When the reclamation work finally was completed, settlers were moved in to populate the new villages and farms.

"We moved these people in what some said was the greatest movement since the children of Israel came out of Egypt!" Holmes said. "We had a special train to move them."

Organizing and carrying out such a migration brought many problems, some of a humorous nature.

"One man showed up with two wives and two families. He could take only one family, so he was forced to choose one. He did, and apparently it turned out satisfactorily for all parties concerned."

All manner of domesticated animals joined the modern-day exodus.

"One old lady brought her goose. In the confusion at the train station, the goose got lost. They had a public address system at the station, and she came up and wanted to call her goose over the loudspeaker. They handed her the microphone, and she called the goose. It came. That gave everyone a real lift!"

Holmes was summoned again from his Florida home, this time for a two-year stint in Pakistan. Eveline joined him for this extended tour. The Ford Foundation had given the Stanford Research Institute a grant to establish an industrial service in Pakistan, a program paralleling agricultural extension. Holmes was

recruited from his orange grove to untangle a problem in the project.

"They had a man they thought was too chummy with the Russians," Holmes said. "He considered himself a peacemaker, and he wanted to buy equipment from the Russians. That didn't suit the Ford Foundation or the SRI. So they fired him, and I was sent to untangle the mess."

In Pakistan he encountered governmental roadblocks to progress found in several other countries.

"For example, the officials controlled the import of materials. Money was shaky, and if a businessman needed something from outside the country — and most of them did — they were thwarted. In the first place, they couldn't get the import permit unless they paid for it — and mostly this was under-the-table payment. The problem was not so much one of educating the people but one of untangling the unholy mess of officials keeping people from doing things unless they were paid off."

While untangling matters, Horace and Eveline occupied a house overlooking the Khyber Pass, gateway between the frontier of West Pakistan and Afghanistan and an important military site for hundreds of years. "We could sit on our roof in the evening, a cool place to sit, and see the caravans — people coming out of Iraq, Iran, Arabia. They didn't pay any attention to borders. They just moved."

Holmes still believes there are too many "Ugly Americans" trying to help underdeveloped countries.

"I think we too often send Americans abroad who want only the salary and the romance," he said. "They don't want to be uncomfortable. As a result they live at a level that is embarrassing to many of the local people. They can't match this level of living, they can't compete, and so they withdraw."

"And we send more Americans, because we think more will be better. It doesn't take many people if they are in the right place and are the right sort. I feel strongly about sending the right people and then giving them the backing needed to do the job."

Today Horace and Eveline live

surrounded by memories of all the strange places they have lived.

Their rambling Shangri-La, with orange and lemon trees growing at the doorstep, is crammed with mementoes from dozens of Asian and African and Latin American lands. Horace's second son, David, an Ocala high school teacher, and his family have a house on the 70-acre orange plantation. Together they tend the 4,000 orange trees, set out after a deep freeze killed most of the grove two years ago.

Surrounding the 80-year-old UT alumnus also are hundreds of papers: his dozens of publications; copies of magazines and newspapers that have printed news of his work; letters from the heads of governments; copies of speeches he and others have delivered. Enough material for a book or two.

And Horace Holmes has thought seriously about a book based on his experiences — but mainly on the "shirt-sleeves" approach to helping Third World countries to help themselves defeat the age-old enemies: poverty, disease, despair.

He has uttered and written hundreds of thousands of words on that subject, all of which may be summed up in a speech he delivered in November 1950 before the Iowa Farm Bureau Convention:

"Our first efforts were to find people who wanted to do something constructive — anything; win their friendship and their trust that we sincerely wanted to help them do something that they wanted to do. This little but important step is most essential. There is a tremendous difference in helping people do something they want to do and in trying to high pressure them to do something someone else feels will be good for them."

To Horace Holmes, helping others help themselves is simply an application of "Holmes Law" — stop doing things that keep it from happening. □

Neal O'Steen (UTK '50) is former editor of the Tennessee Alumnus. He traveled to "Shangri-La" to interview Horace Holmes for this article.

A VESTED INTEREST IN DIVESTMENT

By CHUCK CANTRELL

Study shows getting out of South Africa pays dividends.

Research by a UTC professor and a recent alumna shows that companies benefit by divesting themselves of their interests in South Africa.

The study, conducted by UTC's Maclellan Associate Professor of Insurance Dr. Will Bertin and Brock Scholar Lisa Vitatoe, found that stock prices for U.S. companies moved upward within five days of the announcement of plans to pull out of South Africa.

They examined large, industrial companies that announced their intent to divest during 1986 and 1987. Divestment is "pulling out" or disengagement of a firm's official presence in a country, and it means the companies sell off their assets.

"We were looking for a timely, current issue. And South Africa has become an issue of social conscience and business ethics," says Dr. Bertin. "We found the returns were positive following the announcements. Our findings implied divestment was a good social responsibility move on the part of the firms."

The study examined the stock price movement five days prior and five days following divestment announcements. Although the stock prices of some companies decreased, an aggregate figure showed an upward direction.

The sample of the companies studied included IBM, Kodak, Coca-Cola, Exxon, Xerox, and

other firms whose divestment plans were announced in *The Wall Street Journal*. Less than one percent of each firm's total assets were South African.

"We took a timely issue and used a current methodology to study it," says Dr. Bertin. "Event study methodology is becoming widely used in finance. You are tracking the results of an event on the business environment — in our case the announcement of the companies' plans to divest from South Africa."

The results of the study were released during a week of activities on the UTC campus to educate students about apartheid in South

South Africa has become an issue of social conscience and business ethics.

Africa. Maki Mandela, daughter of imprisoned South African activist Nelson Mandela, was a guest speaker on campus, and several students took up residence in a shantytown outside the student center for the week to show UTC students firsthand the living conditions of black South Africans.

"We organized this to give people an awareness of what apartheid is and what's going on in South Africa," said Cherron Perry,

chair of the anti-apartheid activities. "Students tend to only think about things that are going on on campus. They don't try to find out what is going on in the city, much less what's going on outside of the United States."

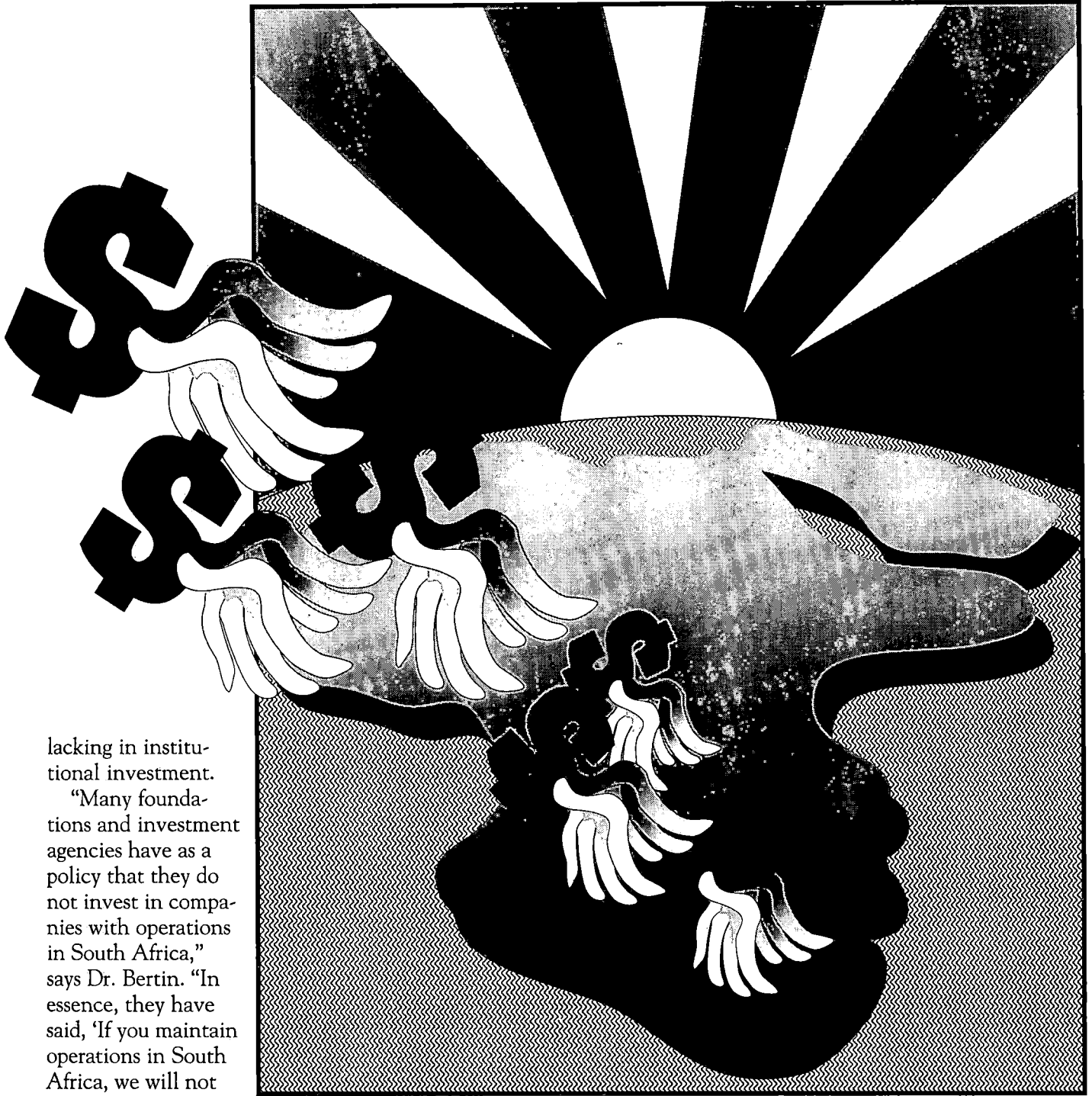
The apartheid government policies of South Africa discriminate against the country's 21 million majority black population, favoring instead the five million white residents.

"We talk about divestment in terms of ethics and conscience, but it's also a result of public pressure, so in some ways I guess you could say it is a public relations move," says Dr. Bertin.

Many critics say divestment eliminates jobs for black South African workers rather than placing pressure on government officials, thus hurting those it's intended to benefit. Dr. Bertin says this is possible in some cases, but critics who use this argument aren't considering the total picture.

If U.S. companies want to sell their assets in South Africa, "they have to be sold to someone," Dr. Bertin explains. So even if the companies' operations are no longer U.S. owned, they probably are still in business.

In some areas, public pressure to divest has been severe, and boycotts have been called against 165 companies with licensing, franchising, or distribution agreements in South Africa. In addition to consumer boycotts, Dr. Bertin says companies that choose to continue operations in South Africa may find themselves



lacking in institutional investment.

"Many foundations and investment agencies have as a policy that they do not invest in companies with operations in South Africa," says Dr. Bertin. "In essence, they have said, 'If you maintain operations in South Africa, we will not invest with your company.' So when a company divests, it instantly becomes eligible for these investments again. And these institutions can greatly influence finances."

The U.S. government has maintained a policy of "wait and see" with South Africa, but many U.S. firms have seen the benefits of divestment — not only for their public images, but also for their financial resources.

"When they divest, the compa-

nies expect it to be a positive move," says Dr. Bertin. "But it is not without risk — quite possibly loss of a profit-making operation in South Africa. But it has become that the real risk is in being over there. The instability of the government and the loss of institutional investments are two real risks." □

Learning to EXCEL

By LAUREN MURPHY

Two UTK profs help promising minority youngsters prepare for college.

*Education: A debt due from
present to future generations.—
George Peabody*

Through Project EXCEL — Encouraging EXcellence in Children Extends Learning — Drs. Carolyn Hodges and Olga Welch are making regular payments on that debt.

More than three years ago, the two UT Knoxville faculty members began to look for a way to “give something back.”

They had come from families that stressed the significance of education. As they advanced through high school and went on to college and graduate school, they encountered many people who provided support, encouragement, and, most importantly, effective teaching. And, throughout their education, they were reminded that they had a responsibility to pass on their knowledge to the next generation.

Hodges and Welch devised Project EXCEL not only to give something back, but also to conduct research in an increasingly important area — the preparation and performance of college-bound minority high school students.

Project EXCEL guides selected above-average inner-city Knoxville high school students from their sophomore year through the summer before they enter college.

EXCEL’s directors stress that it began as, and continues to be, a

research project. “That’s the most important thing about EXCEL,” Hodges said. “Our scholarship needs to be not only something that’s published, but something that can be immediately useful.”

Through the program, Welch and Hodges examine the effects of early enrichment in reading, writing, foreign language, computer skills, and career counseling.

The program also tries to help “demystify” the college experience. “Often, students who haven’t

Several reports have shown that the number of black students applying to colleges and universities is declining, said Hodges.

In 1981, one out of nine college students in the United States was either black or Hispanic, a 56 percent increase since 1971.

Five years later, U.S. Census Bureau figures showed that although black and Hispanic college enrollment had increased slightly, it had not kept pace with higher high school graduation rates.

In 1986, more than three-fourths of blacks aged 18 to 24 had graduated from high school, but only 29 percent of them went on to college.

“Among the several reasons cited for this enrollment decline are the lack of pre-college preparation during the high school years and the unfamiliarity of minority students with the college experience,” Welch said.

“More and more colleges and universities have stepped up their minority recruitment efforts to try to stop the declining enrollment trend. But many of them have only tried to

attract the most gifted students, while ignoring the above-average students with untapped potential.”

These above-average students, whom Welch describes as “diamonds in the rough,” can most benefit from programs like EXCEL.

“These students may not have well-developed academic identities, and they require more training. So when they enter college, they are



Olga Welch

been directly exposed to college life or to people who have gone to college are intimidated by the notion of higher education,” Welch said. “We give EXCEL participants a firsthand look at university life by providing simulated college lectures, seminars, and assignments given by UTK faculty from several disciplines.”

less likely to complete the freshman year, or they remain but perform well below their capabilities.”

Project EXCEL gives these students a more concrete basic education and also prepares them for college and career.

Hodges and Welch began EXCEL as a three-year pilot in the summer of 1986 with 10 students at Knoxville's Austin-East High School, an inner-city school with a 95 percent black enrollment. The students, who were between their freshman and sophomore year, were selected by the school's principal, guidance counselors, and English teachers.

For two months, the students worked with four teachers to upgrade their reading and writing skills.

During their sophomore year, they received their first exposure to the college class experience.

“Before regular classes began, four UT Knoxville professors went to Austin-East to conduct several 55-minute classes similar to those offered to lower division college students,” Welch said. “They would then give the students a writing assignment. After completing the assignments, the students would receive feedback about the project from the professors.”

At the same time, Welch and Hodges submitted the papers to independent raters to get two separate evaluations of the students' work.

The next summer, another program component was added.

“The students put their skills to work with the Knoxville Private Industry Council,” Welch said. “Paid a minimum wage, they helped prepare materials on blacks in non-traditional career fields. These biographies of black contributors in the Knoxville community were used in the PIC's adult GED preparation program.”

Welch said the Private Industry Council work served two purposes. “Not only did the students get to practice what they'd learned, but the nature of the material they worked on helped them begin to

think about their own career paths.”

In their junior year, EXCEL students learned methods to improve their college entrance exam performance.

Between their junior and senior year, EXCEL students began foreign language study. “There is a proven correlation between how students perform in English and in a foreign language,” Hodges said. “Studies



Carolyn Hodges

show students who take a foreign language score higher on exams. And students who take a foreign language for a longer period of time get higher grades than those who take it for a shorter period.”

Hodges, who teaches in UTK's Department of Germanic and Slavic Languages, was especially excited by the students' positive reaction to their foreign language work. “Usually, students shy away from the subject. As a matter of fact, when I first mentioned the possibility of offering German in addition to French, none of the kids wanted to take it. But in the end, they really loved it!”

Also in the final summer, EXCEL students began concentrated work on computers. “Although most of the students have computers in school, they didn't

have much time for hands-on instruction,” Hodges said.

During the three years of the EXCEL pilot, Hodges and Welch encouraged participants to sharpen their library skills. The students learned the correct use of the card catalog, reference resources, and computer search services commonly available in university libraries.

Extracurricular activities also were built into the EXCEL pilot. For instance, when the students studied *West Side Story*, Hodges and Welch took the group to see the UTK theatre production of the play. After the play, they treated the students and their parents to a meal at the restaurant of their choice.

“Some of the kids' only notions of a restaurant were McDonald's and Shoney's,” Welch said. “We wanted them to have a good experience at a real restaurant.”

The parents of EXCEL participants were closely involved with the program. Hodges and Welch met with parents at least once a quarter and provided them with detailed progress reports.

The theme which underscored all the work done by Project EXCEL participants was the development of what Hodges and Welch call “scholar ethos.”

“Scholar ethos is more than being a good student,” said Hodges. “It's a recognition of the beauty of black heritage and the unique role of the black scholar within it.”

To this end, a Knoxville minority community organization, The Links, sponsored a workshop for EXCEL students called “Images of the Black Scholar.” Speakers dealt with such basics as nutrition and study habits, but they also stressed black history and the contributions made by black scholars to that history.

When the first EXCEL class began work in 1986, 11 sophomores participated. One dropped out and three more were added the next year. At the end of their junior year, Hodges and Welch advised another student to discontinue the program. Three seniors failed to

Often students who haven't been directly exposed to college life or to people who have gone to college tend to be intimidated by the notion of higher education.

complete the program, and seven went on to college. Of those seven, one didn't complete his freshman work, largely because he didn't take the courses recommended by EXCEL's directors. Two of the other students dropped out for financial reasons and enlisted in the army largely to finance their college education at a later date.

The remaining four EXCEL participants are studying at UT Knoxville, Memphis State, Austin Peay, and Tennessee State universities. According to Welch and Hodges, all are doing well.

How did the students feel about their EXCEL experience? "Some of the participants were frustrated with the amount of work required by the program," Hodges said. "But they knew we were introducing them to the level of work required in college.

"They also had a little trouble dealing with how rigorously their papers were evaluated. They weren't used to the type of critical, yet constructive, comments offered by the university professors."

Despite the hard work and long hours, the EXCEL participants found the experience valuable. EXCEL graduate Regina Jackson was especially impressed with the concept of "scholar ethos."

"Historically, scholars give back to their communities," she said. "This program motivated me to enter college. Not to go would have been a waste."

Now that the EXCEL pilot has been completed, Welch and Hodges are using preliminary data to refine the project.

In the next EXCEL class, which will consist of 14 students from Knoxville's Austin-East and Rule high schools, computer instruction and foreign language will be offered all three years. Welch and Hodges

want the students to be proficient in the use of computers and have a working knowledge of a foreign language before they enter college.

In the future, EXCEL will solicit more help from the Knoxville community to provide the basis of "scholar ethos." Since the project with the Private Industry Council has been completed, Hodges and Welch will work with area organizations to provide role models for the students.

Each student and his or her role model will work together on a community project of their choice. The EXCEL directors hope the community project will give the students a better sense of their city's needs, and will help develop a close and lasting relationship with their role model.

Welch said she would like to see the Knoxville business community get directly involved with EXCEL participants by offering them summer jobs to complement and enhance their studies.

One significant difference in the new EXCEL class is the addition of white students. Welch and Hodges decided that the benefits of the program should be extended to all above-average students who are at risk because of the lack of adequate preparation.

The new EXCEL class was selected by Welch, Hodges, and the EXCEL teachers with the assistance of a newly appointed advisory committee that includes Knoxville business and education leaders. The committee is chaired by UT Knoxville Provost George Wheeler, whom Hodges and Welch credit with providing the program critical support and encouragement since its inception.

In addition to selection assistance, the advisory board will work with Hodges and Welch in deter-

mining the program's future financial development and expansion.

Welch sees UTK's major participation in the program as being essentially research-oriented. "EXCEL is not a UTK community service project, or a UTK recruitment effort. The program is about what universities *should* be about—establishing partnerships with schools to obtain relevant research. That research can then be funneled back into the schools to improve instruction and also into the universities to impact what happens to students at risk."

UT Knoxville has pledged financial support for the program for three more years.

Hodges and Welch share an ultimate goal for EXCEL's future. "I'd like to see the public schools play a larger role in the program," Hodges said. "I'd also like to see it spread to other Tennessee schools and become a model for other states.

"We hope participation in EXCEL helps students better understand and appreciate what's involved in scholarly work, because it's designed to furnish them not only with essential college level reading and writing skills, but the self-confidence and positive image they'll need to succeed in life," said Hodges.

Near the beginning of the EXCEL pilot, its participants and directors chose a logo for the project. It is a symbol from the African Bantu dialect that means "intelligence."

That quest for intelligence, passed down through the generations, is the driving force behind the advisers, the directors, and most importantly, the participants of Project EXCEL. □

Racing, Flying, Doing Good Deeds

PROFESSOR-PILOT UP IN THE AIR

Dr. Rhelda Barron, UT Martin accounting professor and grandmother of four, has a hard time keeping her feet on the ground since she earned her pilot's license.

Dr. Barron took ground school and flight classes through the UTM evening school aviation program and, within a year, was the first person in her class to receive her pilot's license.

Dr. Barron's husband, Dr. Ottis Barron, a UTM engineering professor, has had his pilot's license for 20 years. The couple has four grandchildren in Knoxville, Memphis, and Vicksburg, Mississippi, and having two pilots in the family will make flights to visit them safer.

"If something were to go wrong, I wanted to know how to get us down," Dr. Barron said.

"I probably would have taken a few courses, but I wouldn't have pursued a pilot's license like I did if the school had not offered the course." The camaraderie of the class motivated her to continue her flying lessons.

"Flying is one of those things you decide to do no matter what the cost," Dr. Barron said.

She says she enjoys the quiet and solitude of flying, as well as the freedom of being away from the world below and being able to see that world from a different perspective.

"I also hope to enjoy going to Knoxville and Vicksburg in three hours instead of seven," Dr. Barron said. □



Dr. Rhelda Barron is flying high after her aviation training through the UT Martin evening school.

SPECIAL DELIVERY

In April 1986, Joyce and Ray Barbarino came from Plantation, Florida, to open their summer home in Gatlinburg as they had done for the past three years. Joyce, then 41, was 23 weeks into a normal pregnancy.

The Barbarinos planned to spend the summer in Tennessee and then return to Florida where the baby would be born. The weather was still cool in Tennessee, so they decided to stay just a week and return later. The day after they arrived, though, their plans changed when Joyce went into labor.

Since this was her first pregnancy, she was unsure what was happening and finally assumed she was having a miscarriage.

She and Ray went to the local medical facility, which transferred Joyce to the High Risk Perinatal Center at UT Medical Center in Knoxville. There, on April 3, Kimberly Susan Barbarino was born. She

weighed one pound and six ounces.

Joyce remembers being told there was only a five percent chance Kimberly would survive and that, if she did, she was likely to have serious medical problems. Even though the odds were against their tiny daughter, Joyce and Ray felt certain the medical staff would fight hard for her life.

When she was two days old and weighed one pound, three ounces, Kimberly underwent surgery and remained on a ventilator for several weeks. This was a difficult time for Joyce and Ray, because they were drawn to their daughter but reluctant to become too close because they were afraid she would die. Joyce says they drew strength from the "cautious optimism" of the staff.

At last Kimberly's condition stabilized, and the Barbarinos had the option of transferring her to Miami, where they would be closer to home. They chose to keep her in Knoxville, though, and there she remained until her 16-week birthday when the Barbarino family went home

to South Florida.

Kimberly's three now, and her pediatrician continues to be amazed by her intelligence and normal growth. She loves books and can name the items on grocery store shelves. And to anyone who asks, she proudly responds, "My name is Kimberly!" □

WE'VE WAITED LONG ENOUGH

There's been a lot of talk about education reform but not much action, says President Alexander, himself a rigorous advocate of reform. A national goal that would get us all moving in the same direction could generate some serious progress.

"The President should set a national goal for all students and all working adults to know eighth grade skills by the end of the 1990s and accomplish this community-by-community, business-by-business," President Alexander said. The recommendation was one of several he advanced as part of

the *American Agenda*, a bipartisan report he and other national leaders prepared for the 41st president of the United States. Former presidents Jimmy Carter and Gerald Ford were among the other participants in the *American Agenda* group.

About one-fourth of eighth graders don't know eighth grade skills, the UT president said. "Perhaps a higher percentage of adults don't.

"Businesses should make sure their employees every five years earn a job certificate bringing them up to date in basic skills, computer skills, and job skills.

"I think business and university leaders are feeling a little frustration," President Alexander said. "The movement for education reform has been up and running strong for a full six years, but there's been a lot more talk than action.

"We tend to think of education as a problem we ought to have a national meeting about." Instead, we need to "take all the talk about improving education and put it into action."

He recalled the goal set by President John Kennedy to put a man on the moon. "I think we need a national goal for education that's just as bold as that."

Communities need to set goals, too, he said, adding that reform must come primarily from the community level.

"We need 100,000 communities setting their own goals and making their own report cards," he said.

The UT Board of Trustees' decision in 1985 to require certain prerequisites for entering students is a good example of local goal setting, President Alexander said.

The requirements, which go into effect this fall on UT campuses, emphasize the natural sciences, foreign language, social studies, algebra,

and a choice of geometry, trigonometry, calculus, or advanced math. Enrollment in these courses has increased considerably as a result.

The need for education reform is serious enough to require a crusade, President Alexander said. And he recommended in the *American Agenda* report that the U.S. president be "a movement leader, not a federal program proposer" and spend one day a

month on education concerns.

He also proposed opening schools year-round, offering parents a choice of public schools for their children, and measuring results instead of spending. He recommended setting another goal that the U.S. should, by the end of the 1990s, be the world leader in research and development.

President Alexander said education reform is necessary for several reasons. Better

schools mean better jobs, he said, and education is the way to "get from the back to the front of the line in America."

"It is the way you train minds to grow the economy to balance the budget. It is the way we will compete in the big league world marketplace. Education helps us learn how to accept on our own terms the tremendous changes coming down upon every one of us." □

MEARS MOVES INTO RETIREMENT

The man who christened Tennessee as Big Orange Country has retired at UT Martin.

Ray Mears, Vol basketball coach from 1963 to 1977 and UTM men's athletics director from 1980 until this year, isn't quite ready to retire completely, though. He is retaining the title of athletics director emeritus.

Mears is known as a motivator and an entrepreneur, as well as an excellent basketball coach. He built the UT Knoxville Vols into a major college basketball power. And, after he moved to Martin, the teams there became NCAA Division II title contenders.

During the 15 years he coached the Vols, Mears applied his motivational skills to inspire his players and arouse fan support for his team. He used those skills with equal effect as UTM athletics director.

In his first year at UTM, football season ticket sales increased 200 percent over the previous year and jumped another 10 percent the following season. UTM basketball revenues the year before Mears' arrival totaled slightly more than \$5,000. By 1983, basketball revenue was up to \$73,650 annually.

He established a football-



Ray Mears, UT Martin athletics director and former Volunteer basketball coach, has retired after more than a quarter-century with the University.

basketball radio network for UTM and obtained private contributions that paid for a modern football pressbox and a stadium expansion. Under Mears, UTM teams won 11 conference championships — two in basketball, one in football, and four each in tennis and rifle. He coined "Pacer Power" as a motto for the UTM teams.

Mears coached Wittenberg (Ohio) University to the NCAA college division national championship in 1962 and became the Vols' head coach the next year.

He advocated a slow-down style of basketball with an em-

phasis on defense. Although fans sometimes grew impatient with the technique, they couldn't quarrel with the results.

His UTK teams compiled a won-lost record of 278-112 and won or shared three Southeastern Conference championships (1967, 1972, 1977). Together with his Wittenberg years, Mears' career record was 399-135. Even though he hasn't coached since 1977, his 74.7 won-lost percentage is still the 13th best in the history of major college basketball.

His last three UTK teams featured the Ernie Grunfeld-

Bernard King duo, two offensively-oriented New York superstars who caused the Mears style of basketball to speed up somewhat.

Mears' teams were the first to represent UTK in the NCAA playoffs. Until he came along, Tennessee had been to only one national tournament — the NIT in 1945. He took the Vols to three NAAs and two more NITs.

He is a member of the athletic halls of fame of Tennessee, Knoxville, and Miami University (his alma mater in Ohio). A street in Knoxville bears his name — Ray Mears Boulevard.

During his years as coach of the Vols, Mears developed a wide range of promotional ideas such as elaborately staged pregame warmups including a player who rode a unicycle and halftime shows featuring bear-wrestling, dancers, and marching bands. He was a frequent speaker at UT alumni chapter

meetings, giving the graduates and friends a sample of the motivational style he used to coach his basketball teams.

Recurring bouts of depression forced him to resign as coach of the basketball Vols, and he took a job as promotions director for the athletics department. Then came the opportunity at UT Martin. Mears approached it with relish, competitiveness, and loyalty to the University.

"I couldn't have left if the new job had not been part of UT. I had 18 years with UT, and I wanted to continue to be a part of it," he told a reporter at the time.

Succeeding Mears as athletics director at UTM is Don McLeary, formerly head football coach.

"It will be a challenge to maintain the program that Coach Mears built," the new AD said. "I look forward to maintaining the commitment he started." □

TWO HARPERS OF ONE MIND

What do Walter and Carla Harper have in common? Well, for starters, they went to the same college, were enrolled in the same engineering program, participated in many of the same organizations, got married, and now they work for the same company.

Walter and Carla both received electrical engineering degrees from UT Knoxville, and both were enrolled in the Minority Engineering Scholarship Program (MESP). But, they didn't actually meet until a mutual friend introduced them one Easter.

Walter, who is a Cincinnati native, applied and was accepted into the MESP at the end of his freshman year at UTK.

The program was begun in

1973 to increase black enrollment in UTK's College of Engineering. Students must have outstanding high school grades and ACT scores to be accepted. They "co-op" alternate semesters at UTK and with co-op employers.

Walter interned with the Aluminum Company of America. When he graduated in 1986, he joined General Electric in Cincinnati in an engineering development program. After a training period of two years, he began his position as a process control engineer on a fighter jet project.

"The main purpose (of the position) is to control the fuel flow to the engine under all known flight conditions," he explained.

With a two-year difference in their ages, Carla graduated from UTK in June 1988.

Whereas Walter didn't enter the MESP until after his

first year in college, Carla began her first internship the summer immediately following her graduation from Hamilton High School in Memphis. MESP officials had visited her high school to describe the program to interested students, and she was accepted.

She interned with Procter and Gamble in Jackson, Tennessee, and later with the Aluminum Company of America.

The Harpers were married in March 1987, before Carla graduated, and she, too, went to work for General Electric. She's now in the final year of a two-year training program that has included assignments in several areas. While she finishes her training, Walter is finishing his master's degree in electrical engineering at the University of Cincinnati.

James Pippin, director of the UTK minority engineering program, remembers Walter and Carla as high achievers and excellent students.

"In addition to their academic work, involvement in the Society of Black Engineers, and MESP participation, they were involved in other engineering programs and community outreach programs," Pippin said.

The Harpers returned to UTK last fall to speak to students in the College of Engineering.

"They're part of an effort between UTK and General Electric to recruit more engineers," Pippin said. "They'll probably speak on behalf of General Electric on a regular basis. They'll also be speaking to the Society of Black Engineers on an annual basis."

Apparently the Harpers' togetherness goes only so far. Although they work in the same plant, they say they rarely see each other on the job.

"It's a good five-minute walk to his department," Carla says. □

AGAINST ALL ODDS

Dr. Clark Smeltzer has overcome overwhelming odds to remain in his medical practice and serve his community.

Despite a diagnosis of multiple sclerosis in 1975, Dr. Smeltzer (UT Memphis '71) has managed to keep his general practice and serve on the EDC-Mental Health Board representing Cherokee County, Alabama. And because of his unrelenting efforts in behalf of the retarded, a new training center for the mentally handicapped was named in his honor.

Dr. Smeltzer is modest about his accomplishments and says he didn't feel the center should have been named for him.

However, Margaret Guss, vice president of the board for the Association of Retarded Citizens and president of the Clark Smeltzer Training Center board, feels differently.

"It's remarkable that he is in practice and even more remarkable that he has time and energy to devote himself to anything beyond that," Guss said of Dr. Smeltzer.

"He spoke on behalf of retarded citizens in many meetings. Without his enthusiasm, I don't think we would have had the support we needed for the center."

Dr. Smeltzer was instrumental in securing the contract between the Alabama Department of Mental Health/Mental Retardation Board and the Etowah County Association for Retarded Citizens that made the center possible.

The center trains mentally retarded adults to socialize, perform certain jobs, and function in day-to-day activities, Dr. Smeltzer's wife, Beth, explained.

"This training center makes these people feel needed and



Dr. Clark Smeltzer

useful," she said.

Dr. Smeltzer was notified in mid-September 1988 that the center was being named in his honor.

"I was very surprised and flattered," he said.

Dr. Smeltzer had completed two years in a surgery residency and had a promising future until the multiple sclerosis diagnosis.

"At first he denied it, but after he accepted the handicap, he decided to do all that he was able to do," Mrs. Smeltzer said.

EXCHANGE FRUITFUL FOR MEDICAL STUDENT

UT Memphis has five formal international exchange student programs to provide academic experience and promote international cooperation in medical education. Agreements include programs in Japan, India, France, Israel, and two in Egypt.

Carol Smith (UT Memphis '88) was the second student to represent UT Memphis at Hebrew University's Hadassah Medical School in Jerusalem. She returned last summer to begin her residency in pediatrics and wrote this account of her ex-

He practiced medicine in Evergreen, Alabama, until 1977, when he and his wife moved to Centre, Alabama, to take over the practice he still maintains. His method of operation involves staying busy and keeping a positive attitude.

"I've never seen Dr. Smeltzer other than with a smile on his face," Guss said.

Mrs. Smeltzer echoes Guss's sentiments. The couple keeps a positive outlook, she says, "by concentrating on the good and not the bad." □

perience for the UT Memphis Record.

What an exciting time to be in Israel—I came away with a depth of understanding of the people, the cultures, and the conflict that simply cannot be comprehended from reading the newspapers or by listening to commentaries on the late night news.

Israel is meant to be experienced.

Although Israel is in a third world setting, it is far from being nonprogressive. Hadassah Hospital, one of the largest in the Middle East, offers everything from primary care to sophisticated medical procedures on par with any large

U.S. facility.

As an exchange student, you can spend several weeks rotating through your choice of departments. You work with Israeli medical students and other exchange students from all over the world.

The staff is made up of some of Israel's best physicians, including previous chairmen from prestigious universities outside Israel whose strong sense of nationalism has brought them to Hadassah to practice. Language is not a problem. Hebrew, English, and Arabic are spoken freely.

Any differences in medical practices in Israel appear to be primarily due to lack of funds. Since 60 percent of the national budget is allocated for defense, this leaves a smaller portion for health care needs. Thirty percent of the entire operating budget of the hospital is funded by money raised by an organization of Jewish women in the United States. But patient care costs are still high.

This relative lack of money may limit the use of expensive, prepackaged disposables that we've become used to in the United States, but does not limit the quality of care that any patient receives.

And while you may see physicians "on strike" for better salaries, you will not see patients turned away for any reason.

I spent four weeks in the cardiology intensive care unit, and two weeks in the dermatology clinic. I saw patients from all over the Middle East receive equal and up-to-date care.

Hadassah Hospital is a wonderful experience for a foreign exchange student. I learned more than just medicine—I learned the culture of a people and I came away with an appreciation of the conflict and joy of the Israeli experience. □

RECIPE FOR SUCCESS

The stork practically delivered Evelyn Eidson Seagle (UTC '66) to a restaurant.

Ever since she was born, her parents have worked in the restaurant industry (except for her father's short stint as an Army cook). As a youngster, Seagle helped her mother and grandmother test recipes in their home to be considered as menu items in the family restaurant. At 14, she actually began working in the restaurant, and she continued on through college.

"The restaurant business is just like anything else. The more you do, the more you learn," says Seagle, the first female president of the Tennessee Restaurateurs Association. "And I sometimes believe that my sociology degree has been more helpful to me than a restaurant management degree would be. It's definitely a people business, so it's good that I know about people."

She was a school social worker for a while after graduating from UTC. Then in 1972, she moved to San Francisco where she held several secretarial positions, including one for the accounting firm of Price Waterhouse, the agency that counts the votes for the Academy Awards.

"Maybe they just never told me," says Seagle, "but they really did keep the results a secret. We didn't know what movies were going to win."

When she returned to Chattanooga, she tried another serving of the restaurant business and this time found just the right recipe. Since 1973, she has served as manager of the Eidson Restaurant in Chattanooga.

"No matter what I did, it seemed I was always working here," says Seagle. "When I was in school I worked here."

And then when I got out of school and got a job with the school system, I still helped out here. So coming to work here full time just seemed inevitable."

In 1976, more than 20 years after the restaurant first opened, Seagle made a few changes to the mom 'n' pop diner. A new kitchen and expanded dining area were added. The menu was updated to include more sophisticated offerings along with some traditional favorites.

The changes paid off. A two-time winner of the Chattanooga Restaurateur of the Year, Seagle was named 1984 Tennessee Restaurateur of the Year.

"You have to give the best service possible," she says. "If

that means the manager buses tables or grabs a spatula in the kitchen, then that's what you do. We have a lot of competition today, so you have to work hard to be the best.

"We carry such a wide variety of foods that it's difficult, but we work very hard to maintain freshness in our ingredients. We use only fresh vegetables. We do our own butchering. We cut our own steaks. We even grind our own hamburger meat."

Tastes have changed over the years, and Seagle says today's restaurant customers have become more health conscious.

"Restaurants have to offer healthy menu items — less fat, less cholesterol, less sodium,

less calories. They should use vegetable oil for cooking," says Seagle. "And cleanliness is more important."

Quality food is the mainstay of any restaurant, but Seagle says in blue plate restaurants such as her family's service is just as important an ingredient.

"There are so many fast-food restaurants today that when people take the time to go to a full-service restaurant, their expectations are a little higher. Ours being a family restaurant, I guess we take it a little more personally — because it's your name out there on the sign. It's like they are coming into your home, and if they have a bad experience, then it's bad for you as well." □

DOCTOR ENJOYS RACY HOBBY

To Ken Knott, "life in the fast lane" is more than just a description of his hectic lifestyle.

The 1976 graduate of UT Memphis not only maintains two medical practices, but he's a race car driver, too. Shuttling back and forth between doctoring duties in Marietta, Georgia, and Columbus, Ohio, would be enough to keep most mortals occupied. But Dr. Knott also pencilled in 12 races on his 1989 calendar.

"Eighty percent of my time is devoted to my medical practices," he said. He estimated racing this year would occupy about 60 days.

He said some people don't take him seriously as a race car driver, but he's interested enough in it that he might consider taking a leave of absence and racing full time.

He got into racing by moonlighting as a racetrack doctor: when cars are tested before races, a doctor has to be present for safety reasons. As a young surgical intern in Phoenix, he took the job to make extra money.

By 1979, when he was doing his residency in Columbus, he was hooked. Despite his demanding work, he attended the Skip Barber Racing School at Morosco Raceway in West Palm Beach, Florida, and entered several amateur races.

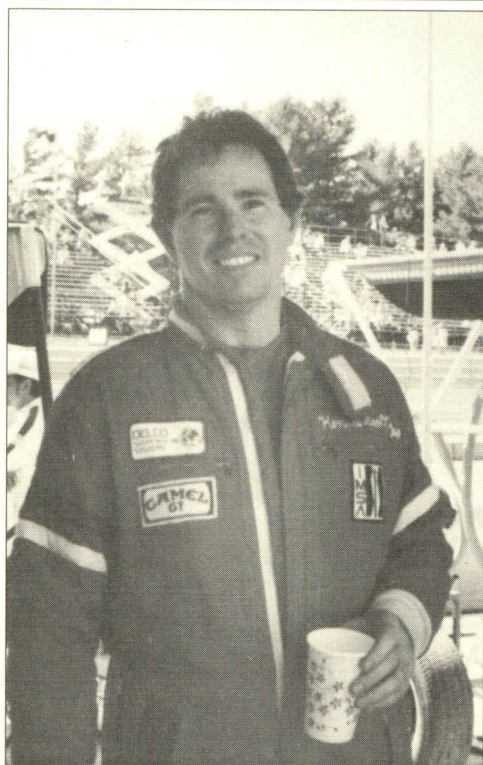
Completing the residency program and beginning his career took more and more of his time, though, and he had to put racing on the back burner. He decided to set up practice in Columbus and concentrate on physical medicine and the rehabilitation of soft tissue injuries.

"Over 80 percent of injuries are to soft tissues of the neck, back, arms, and legs, such



Good taste keeps Evelyn Eidson Seagle's customers coming back to Eidson's Restaurant in Chattanooga. The UTC alumna says her sociology degree has helped her in her people-oriented business.

CINDY TATE



Dr. Ken Knott "moonlights" as a race car driver while maintaining two medical practices.

as ligaments and tendons," he said. "Physical medicine treats injuries by using injections and physical and occupational therapy."

He tired of Ohio's cold weather and subsequently set up the second practice in the more temperate climate of Marietta. He spends Saturday through Thursday in Georgia and the rest of the week in Ohio.

In 1982, he eked out enough time from his schedule to get back to racing. He completed a course at the Bob Bondurant School of Performance Driving in Sonoma, California, and returned to the track, winning his first race after a three-year layoff. He went on to place fourth nationally in the Skip Barber racing series that year.

In 1984, he came in second in the Barber National Championship. He beat the winner of the deciding race the day before, but an improper carburetor adjustment kept him from having enough power to take first place.

He began entering profes-

sional races in 1985 and placed ninth in his first pro race, the Columbus 500. He has his own car, a GTP-light, which has an enclosed cockpit and reaches speeds of up to 180 miles an hour.

"Because the cockpit is covered, it's like chopping wood in a sauna," Dr. Knott joked. The temperature inside the race car reaches about 130 degrees, requiring Dr. Knott to wear a "cool suit" that circulates cool liquid through the suit and helmet.

Although he relishes the competition and excitement of racing, he also enjoys meeting the interesting people and doing something most people only dream about.

His biggest fans are his two children, 3-year-old son Spencer and five-and-a-half-year-old daughter Raleigh. Although his children and his wife, Kathryn, provide all the emotional support and encouragement he needs, racing requires financial support as well. When Dr. Knott lost his original sponsor, he found himself struggling.

He competed in 1986 and '87, but the inadequate financial backing made proper car maintenance impossible and cost him some prominent placements. In, 1988, he competed in the Barber-Saab pro series at various tracks throughout the United States, and now he's discussing a sponsorship arrangement with a former National Football League star.

"Most physicians spend most of their time in medicine and turn to golf for relaxation," Dr. Knott said. "I found golf boring."

And those little carts are so slow.... □

BIG HEART MAKES BIG DIFFERENCE

Father Donald E. Mowery has devoted his life to the service of God and to helping others.

Mowery, who graduated from UT Chattanooga in 1953, is the founder and president of Youth Service USA, a national program for disadvantaged young people.

The youth service began in Memphis in the early 1960s as a camp program for inner-city high school students. But in 1968, when Dr. Martin Luther King Jr. was killed, the Memphis police department requested that the camps be closed during the resulting turmoil.

"But that's when we needed them most so the children would have a way to fill their time," Mowery said. He took his case to the U.S. Navy, asking if he could use some of the Navy's undeveloped land in Memphis for the youth program.

"They were very reluctant," Mowery recalls, "but they saw that the turmoil could overlap into the military, and they let us use the land."

He said naval personnel didn't pay much attention to him or the youngsters at first.

"After a while, though, they began to see us as real people. The Navy doctors began giving the youths medical and dental check-ups."

Encouraged by the attention, Mowery asked for more cooperation from the Navy. He knew that more than 300 different jobs were taught to incoming military personnel at the Memphis Naval Air Station. Why not allow his youth groups to learn, too?

"I felt the youths could learn motivation and how to set goals and form role models from exposure to these people," Mowery said. He developed a vocational program for the high school students that was so successful he later was invited to an Arkansas air base to oversee the same type program there. In 1970, the military partnership of Youth Service USA was founded.

Mowery didn't stop there. Next he began to formulate a separate Youth Service USA program for people between 18 and 24 years old. The new effort included church participation in addition to military cooperation.

"I recognized the potential of exposure to military job training," Mowery said. "I asked the military if the people could fill the empty chairs in the training classes because, as I pointed out, it wouldn't cost the government any more to teach a full class than to teach a half-empty class. Upon completion of the classes, the Youth Service trainees made higher test scores than the military personnel."

Mowery attributes the youths' success to counseling provided by the church. "Counselors made sure the young adults were being trained, did their homework, and got to class," he said.

The counselors also served as math and English tutors.

"These are basic subjects, but a lot of older inner-city youths have difficulty with them," Mowery said.

From this point, Youth Service USA's programs expanded into other departments of the military and other parts of the country. Mowery even received a request from then-Governor Lamar Alexander to expand into different sections of Tennessee.

The program for the older youths uses government facilities to train unemployed people cost-efficiently, Mowery said. There are certain restrictions on who can be accepted into the program.

"Those accepted must be unemployed with a low income," Mowery said. "Seventy-nine percent are women on welfare."

The five-month training period concludes with a graduation ceremony. Mowery said his greatest fulfillment comes then.

"I go to all the graduations. Seeing the people who went through the program and knowing the next day they will most likely have jobs to go to is my biggest reward."

Recently, Mowery received other rewards for his 25-year service to the organization. He received the first Episcopal Bishop's Award for Ministry, the Outstanding Tennessean Award from Governor Ned McWherter, and the Award of Merit, given jointly by the Memphis and Shelby County governments.

Mowery's degree was in business and economics. He spent three years in divinity school at Yale and one year as an apprentice. He then was ordained a deacon in 1956 and the next year was consecrated as a priest. From 1956 to 1963, Mowery was rector of St. Andrews Episcopal Church in Nashville, where he also

worked with institutions for juvenile delinquents. In 1963 he was asked to oversee the youth program in Memphis.

In addition to his full-time position as president of Youth Service USA, Mowery is bishop of St. Mary's Cathedral in Memphis.

"We've started 113 programs, and even though all of

those aren't still around, the ministry has touched over 600,000 young people across the country," he said.

What's in store for the future? Mowery is looking forward to more growth of the programs. A \$2 million fundraising campaign will allow expansion with less reliance on government funding.

"Before George Bush was elected president, he requested that I come to Washington to discuss the program with him, and I'm waiting to hear more about that. We've had requests from all over the country, and I think there is potential for a very important job training program across the United States." □

BOMBS AWAY!

Gene McKissic and his partner, Jim Jones, should soon be richer thanks to help from UT's Center for Industrial Services (CIS).

McKissic and Jones won a \$1.8 million contract from the Defense Department for their Cleveland, Tennessee, company, MJS Inc. Counseling and technical assistance from UT made it happen.

"The people at CIS were instrumental in completing our bid solicitation, in getting specifications and drawings for us, and in answering the questions we had about our contract," McKissic said.

MJS Inc. soon will start manufacturing 10,250 bomb racks for the Department of Defense.

"The contract has allowed us to expand our operations into a second shift. This will mean eight to 10 new positions in the plant," McKissic explained.

The Center for Industrial Services operates a full-time program, Procurement Technical Assistance, to help business and industry in Tennessee win lucrative DOD contracts.

McKissic first heard about the program through a newspaper article. He then attended special "how-to" workshops on contracting with the defense department. CIS sponsors the workshops statewide.

MJS Inc. now solicits for contracts every day through

CIS' on-line computer matching service, which is part of the Procurement Technical Assistance Program. It matches Tennessee products and services with defense department needs through a \$30,000 computer system. Industrial managers who ask to participate are alerted when contracts sent out for bid by DOD appear to match what they have to sell.

CIS has operated the Procurement Technical Assistance Program since 1986, helping Tennessee businesses

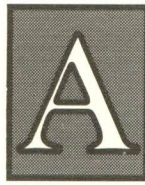
win contracts and subcontracts worth more than \$125 million in the last two years. The Department of Defense sponsors similar programs in Florida, Georgia, Mississippi, and South Carolina to encourage competition and spur contracts.

"Everyone has just been outstanding. UT's really been in our corner on this," McKissic said. "The list of what has been done for us goes on and on. I hope we can keep working with CIS in the future." □



Jim Jones, left, and Gene McKissic, partners in a Cleveland, Tennessee, company that recently won a \$1.8 million defense contract with help from UT, celebrate the good news with Nell Tays of the University's Center for Industrial Services.

A NEW LOOK: ANDREW JOHNSON



Andrew Johnson, standing on the capitol steps in Nashville the night of October 24, 1864, freed the slaves in Tennessee. Although he would be president of the United States a few months later and would lead the country through the Reconstruction era, he already had struck his most lasting blow for racial equality.

For Johnson, despite freeing the slaves in Tennessee, was an unabashed racist to whom blacks were something less than human. That's the conclusion of David Warren Bowen (UTK '66, '70, '76) in his new Johnson biography, *Andrew Johnson and the Negro*, published by UT Press.

Bowen has looked more deeply into Johnson's racial attitudes than previous biographers. His sources reflect the changing views of American scholarship, ranging from materials of the 19th and early 20th centuries, when racism was still somewhat acceptable, to today's "revisionist" scholars who see Johnson more and more in a racist light.

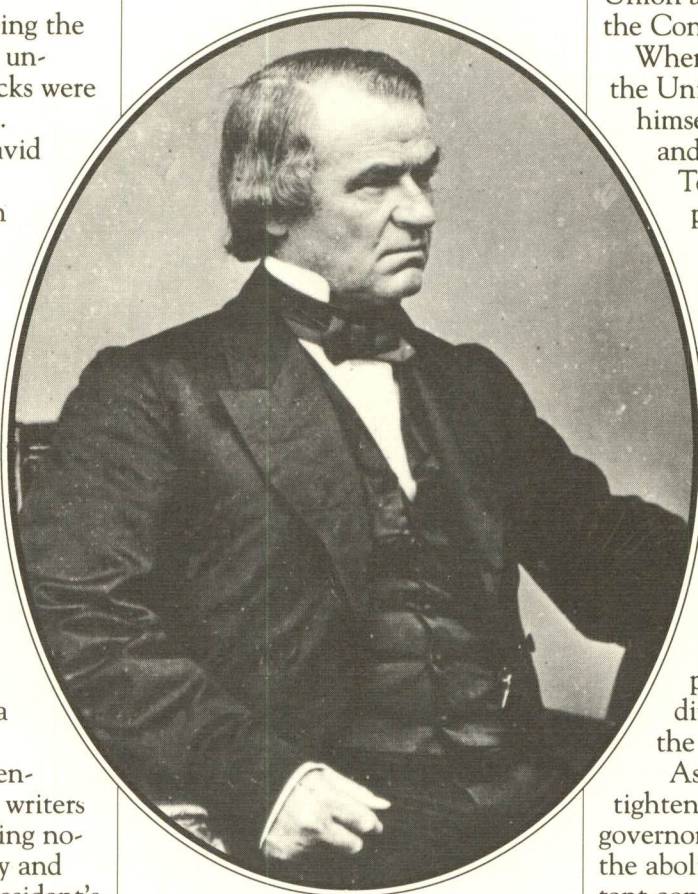
"In the first half of this century, avowedly pro-Johnson writers usually reflected the prevailing notions about Negro inferiority and saw Reconstruction as the president's finest hour," Bowen writes.

Things are different now, though. "Living in an age in which 'racist' has become a pejorative and belief in racial inferiority a refuge for the ignorant, contemporary historians are almost required to look with some degree of disfavor at Johnson's policies and often at the man himself," Bowen says.

From today's perspective, it goes without saying that slavery and racism aren't compatible with de-

mocracy. But that wasn't necessarily true in the 19th century, and accounts of Johnson's presidency have to take that into consideration.

"Given the situation in which Johnson found himself, that of a southern politician, it was almost inevitable that he become a staunch defender of the peculiar institution," Bowen writes. "Any other course would have required an al-



President Andrew Johnson, 1865.

(Courtesy National Archives; from The Papers of Andrew Johnson, Volume 7, edited by Paul Bergeron.)

most revolutionary personality."

Johnson was anything but revolutionary. The son of a hotel porter and a maid, he prided himself on being a self-made man. Despite holding powerful political offices, he never was accepted as a part of the Southern establishment. He

adopted many of their ways, though, including owning slaves.

Johnson's political career was in high gear when the threat of secession arose, and he apparently failed to take the possibility seriously. He never wavered in his support of the Union. Though he remained an advocate of slavery, he thought the difficulties between North and South could be resolved "inside the Union and upon the battlement of the Constitution."

When he publicly committed to the Union, Johnson effectively cut himself off from Southern allies and from the power base of Tennessee's Democratic party. In the North, on the other hand, he became a sort of folk hero. Lincoln placed Tennessee patronage in his hands, and he was the loyal South's most influential spokesman in Congress.

The deal was cemented when Lincoln appointed him military governor, Bowen writes.

"...The nature of the office made Johnson, heretofore a powerful and independent-minded senator, directly subject to the will of the president," Bowen says.

As more political strings tightened around him, the military governor adopted, at least publicly, the abolitionist cause. His "reluctant conversion...limited in nature and so clearly the product of political necessity," led him to the 1864 pronouncement abolishing slavery in Tennessee.

Unfortunately, Johnson's public stand seemingly did little to alter his personal views. He thought restoring a stable state government was more important than the status of blacks and underwent no basic transformation that made him think blacks were the equals of whites.

In what Bowen calls "one of the

most significant 'misunderstandings' in American history," Johnson was nominated and elected Lincoln's vice president. Moderate Republicans, who believed in racial equality (at least to some extent), somehow thought they had an ally in Johnson, who adamantly opposed it. With Lincoln's assassination, the trouble began.

"It placed in the most powerful position in the government a man whose personal conception of black people was different from the majority of the party that had elected him," Bowen writes. "Perhaps most important, the elements which had converted that man from a slave-owner to an advocate of freedom were now missing... A clash between Johnson and his former associates was almost unavoidable."

And the clash, the "significant misunderstanding" between America's citizens and its president, occurred just as the future of thousands of freed slaves was to be determined.

Most Republicans approached Reconstruction with the idea of establishing a "second class" or "apprentice" citizenship for blacks. They had guilts about slavery. Johnson had none.

"Andrew Johnson, in short, had come to terms with his racist beliefs..." Bowen writes. "The injustice done black people was simply not the problem. They were not human beings in the normal meaning of the word..."

When Johnson vetoed both the Freedmen's Bureau bill and the Civil Rights bill, he said it was on constitutional grounds. He told blacks that he had opposed slavery because it was a "great monopoly," not because it was morally wrong, but because it was a threat to democracy.

He became increasingly isolated and more and more tended to act on his personal convictions rather than the will of the people. His "rigid personality tended to ignore the subtle meanings of ideas contrary to his own," Bowen writes.

"Opponents, in his estimation, were always self-serving; they were never men as deeply committed to their understanding of right as he was."

Anyone who opposed his policies might be tagged "wild upon negro franchise."

In Johnson's eyes, "support for black suffrage, with its implication of racial equality, was, by definition, opposition to democracy and the American system of government and, therefore, as much treason as the southern rebellion itself," Bowen writes.

"Having no illusions about the 'humanness' of blacks, Johnson never understood this distinction between 'natural' and 'political' rights."

Moderate Republicans were scarcely rabid supporters of universal suffrage, but they expected a Reconstruction that guaranteed some basic human rights for the freedmen. They and their president moved ever further apart until Johnson found himself in virtual political isolation. But, he continued to wage political warfare, Bowen says.

"It was his success as an irritant to the ascendant Congress rather than his failure that led to impeachment. Even here, the Republicans were forced to act more from frustration than political calculation. As a result, their efforts were based on a weak foundation that ended in the failure to remove him from office."

Even though he served out his term, Johnson left office determined to vindicate himself. Indeed, he did return to the Senate in 1875, shortly before his death. And he was viewed not unkindly by writers of his era. Now though, his reputation isn't so good.

"There is little doubt that this present assessment of the embattled president has been influenced, if not determined, by the change in the general attitude toward race that took place following the Second World War," Bowen writes.

Modern historians need to be careful and to learn from the past, the author says.

"This simple ratio between racial attitude and interpretation is something that we modern 'revisionists' should remind ourselves of when passing judgment on our predecessors as well as the historical characters we seek to analyze."—

DB □

TRUST TO SUPPORT PRESIDENTS CENTER

Tennessee's three presidents — Andrew Johnson, Andrew Jackson, and James Polk — left a rich heritage of papers and documents. UT Knoxville houses the documentary editing projects of all three in its Tennessee Presidents Center.

As part of that activity, UTK has formed the Tennessee Presidents Trust to promote awareness of civic leadership. The trust will support research and publications relating to work of the Presidents Center.

The trust also will sponsor educational projects and recognize community leaders in each of Tennessee's 95 counties.

"The three Tennessee presidents gave the state a legacy of leadership, so the trust is seeking to recognize today's community leaders," said Dr. Patricia Brake Howard, director of the Tennessee Presidents Trust.

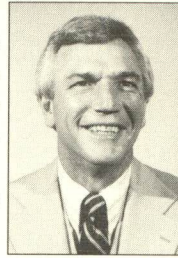
No other university in the country has three presidential papers projects. The purpose of the research is to collect, edit, and document the works of the presidents.

The trust's board of governors includes: Wilma Dykeman, Alex Haley, and Natalie Haslam, representing the Knoxville area; Spencer J. McCallie III of Chattanooga; Edward F. Jones and Ron Steine, representing Nashville; Lewis Donelson and Annabel Woodall of Memphis; and Nellie McNeil, Pat Wiley, and Patsy Williams, representing the Tri-Cities area.

Some of the projects the trust wants to see implemented include educational packets on the presidents for use in middle schools and collaboration with art museums to present a portrait exhibit about the three presidents.

★ ★ ★

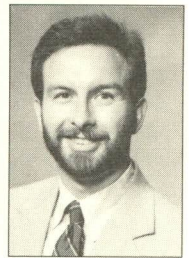
Alumni and friends throughout the country have gathered recently at chapter functions. Following are reports from alumni programs directors Bob Carroll, Dona Diftler, and Kerry Witcher.



Carroll



Diftler



Witcher

MEETING AND GREETING

Anderson County, November 3, Lady Vols scrimmage at Oak Ridge High School. Cosponsored with the Girls' Club of Oak Ridge.

Rocky Mountain, November 9, dinner at Zang Brewing Company in Denver. Speaker, Dr. Mike Pelton, UTK professor of forestry. New president: Mary Lynn Grover. Attendance, 52.

Coffee, Franklin, and Moore counties, November 10, reception and Lady Vols scrimmage at Motlow State Community College. Cosponsored by the Motlow College Foundation.

Marion County, November 10, potluck dinner at the home of Bill and Becky Killian in South Pittsburg. Speaker, Dr. Bill Bass, professor and head of anthropology at UTK. New officers: George Lloyd, president, and Jerry Bible, vice president. Attendance, 39.

Southern California, November 10, dinner at Marmac's Restaurant in Garden Grove. Speaker, Dr.

Mike Pelton. Attendance, 19.

Northern California, November 12, dinner at Hyatt Regency, San Francisco. Speaker, Dr. Mike Pelton. New officers: John Thompson, president; Joe Murphy, vice president; Tracy Heller, secretary; Susan Keely, treasurer. Attendance, 31.

Henderson County, November 16, dinner at Western Sizzlin' Steak House in Lexington. Speaker, Dr. Bob Smith, dean of arts and sciences, UT Martin. Attendance, 31.

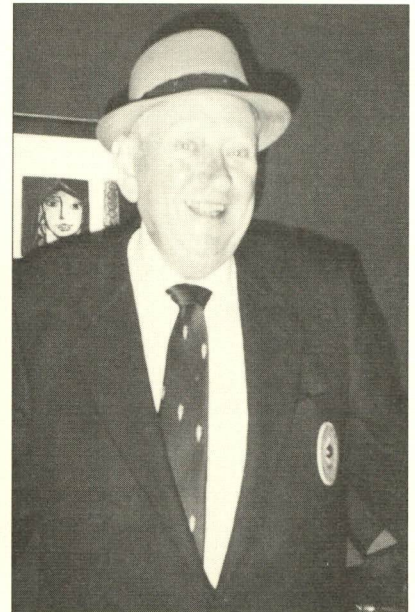
Hardeman County, November 22, dinner at Joe's Restaurant in Bolivar. Speaker, Don McLeary, UT Martin football coach. Atten-



UTK Athletics Director Doug Dickey and Robertson County chapter president Kim Bibb greet friends.



Dr. Mike Pelton from UT Knoxville spoke at the Rocky Mountain chapter meeting. With him is Jenny Edwards, chapter president.



Earl Zwingle was among those attending the Northern California meeting.

dance, 40.

North Georgia, November 29, reception at Dalton Country Club. Speaker, Dr. Bill Bass. Attendance, 34.

Lawrence County, November 29, dinner at David Crockett State Park restaurant. Speaker, UT Martin Chancellor Margaret Perry. Attendance, 67.

Atlanta, December 1, Atlanta Hawks basketball game at the Omni. Attendance, 126.

Knox County, December 4, lunch and Christmas music program at UTK. Attendance, 219.

Dyer County, December 8, dinner at Dyersburg Country Club. Speaker, Dr. Bob Smith. Attendance, 27.

Houston, December 9, Christmas party at home of Jean Profitt. Attendance, 35.

Houston, December 29, TV party at Gators to watch Volunteers versus Memphis State basketball game. Attendance, 12.

Houston, January 2, Sugar Bowl party at Ramada Inn Northwest. Attendance, 30.

Houston, January 7, TV party at Gators to watch Volunteers versus Mississippi State basketball game. Attendance, 20.

Central Florida, January 9, reception at DeLand Hilton and Lady Vols game. Speaker, Lady Vols Coach Pat Summitt. Bob Peach re-elected president. Attendance, 65.

Tallahassee, January 10, dinner at Brown Derby Restaurant. Speaker, Dr. Joe Johnson, executive vice president. New officers: president, Larry Wilson (re-elected), and vice president, Richard Tudor. Attendance, 32.

Jacksonville, January 11, reception at Sawgrass Marriott. Speaker, Dr. Joe Johnson. Attendance, 20.

Wilson County, January 18, dinner at Cumberland University. Speaker, Dr. Kelly Leiter, dean of the UTK College of Communica-

tions. New officers: president, Walter Baird; president-elect, John Baker. Attendance, 23.

Davidson County, January 19, reception at Sheraton-Music City. Entertainment by the UTK Singers. New officers: president, Bart White; president-elect, Ronny Roberts; secretary, Steve Wilson; treasurer, Ken Wills. Attendance, 100.

Dallas-Fort Worth, January 21, TV party at Humperdinks to watch Volunteers versus Kentucky basketball game. Attendance, 40.

Houston, January 21, TV party at Gators. Attendance, 25.

Houston, January 25, SEC alumni dinner at the Texas Club. Speaker, SEC Commissioner Harvey Schiller. Attendance, 40.

New York, January 25, SEC party at the Surf Club. Attendance, 50.

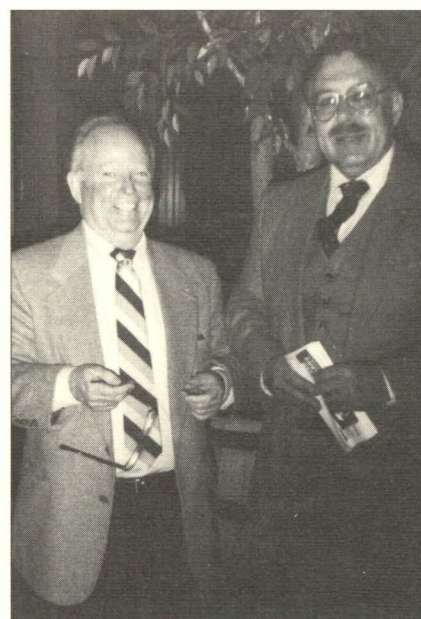
Rocky Mountain, January 28, train ride-ski trip to Winter Park Ski Resort. Attendance, 28. □



UT trustee Marcia Echols, center, was a special guest at the Robertson County chapter meeting. With her is her mother, Susie Austin, right, and chapter president Kim Bibb.



Among the alumni working at college night in Houston were Mike Goldstein, left, and Alf Sutherland.



Dr. Kelly Gregory, right, past president of the Wilson County chapter, chats with Dr. Kelly Leiter, dean of the UTK College of Communications.

INTRODUCING A NEW PRESIDENT

Though from a small town, he has big ideas for the NAA.

Ed Townsend thinks a little nudge is all it takes to get alumni involved with the University. That's the way it happened with him.

Townsend didn't go to the meeting of the Decatur County UT alumni chapter in spring 1980, and, just like in the familiar joke, he was elected president. But that was the nudge he needed to become an active alumnus. And he didn't stop until he reached the top — he's the new president of the 180,000-member UT National Alumni Association.

The stint as president demands a lot of time and energy. Job and family sometimes are shortchanged as the president travels, speaks, meets, and greets on behalf of the NAA. When asked to serve, the 35-year-old Townsend didn't think first of time demands, though. His concern was whether he could play in the alumni band at UTK homecoming.

"I played trombone in the band as an undergraduate, and I've enjoyed being in the alumni band at homecoming. But the president of the alumni association is always in the press box to do the invocation at the homecoming game, and I didn't think I could do both.

"I decided I could skip being in the alumni band for one year, but I really didn't want to. Shortly after that, I saw Dr. (Jay) Julian (band director) and Jim Sparks (assistant director), and Jim said, 'Ed, no problem. We'll put a microphone on the field for you!'"



NICK MYERS

Ed Townsend begins a year of traveling, meeting, and working on behalf of the University of Tennessee.

With the playing and praying conflict resolved, Townsend can confront some more serious issues. The alumni scholarship program, for one, will receive some close attention during his term.

"President Alexander may ask the alumni association to fund some 'full-ride' scholarships, which we'll try to find the funds to do," he said. "The problem is that, although our annual giving is growing by leaps and bounds, it's growing in desig-

nated funds. Contributors give to their favorite programs. So the alumni scholarships, which are funded by undesignated gifts, haven't increased much lately. We've got to increase our undesignated gifts to offer more valuable scholarships."

He's also concerned about involving more young alumni in the NAA. More low-cost activities might help draw them in, Townsend said. Like himself, they

probably need an opportunity to get involved, a nudge to take part.

"I go to more than a dozen chapter meetings a year. And I don't go thinking about raising money. At chapter meetings, you see people you went to school with, people you have something in common with. You can talk about old times or good things that are going on at the University. It's a fun experience."

Townsend is an attorney in the quiet West Tennessee town of Parsons. A bachelor, he enjoys the relaxed pace of small town life.

"I was born in Parsons, raised in Parsons, my family is from Parsons. I don't have to wait on elevators or

golfer, and a self-taught computer buff.

"I've never taken any computer courses. I just did some reading and then tried out what I'd learned. By doing that, I've learned to use computers on my desk. Sort of the same way, I bought a book on golf club repair and learned to do that."

Some of his fondest memories from UTK, where he earned degrees in accounting and law, revolve around the Pride of the Southland Band and its distinctive director, Dr. Jay Julian. Although Dr. Julian asked a lot of his charges, he gave a lot in return, Townsend said. One incident stands out in his memory.

"We were marching in Nashville's Christmas parade, and some people in one of the Vanderbilt dorms started throwing things at us. Doc came running out in the street and stopped the band. He waved us off the street and we walked along the sidewalk on the other side until we got past Vanderbilt. Then he

reformed the band," Townsend laughs, recalling Dr. Julian's determination to protect the students.

Townsend thinks his work is cut out for him as NAA president.

"I've got some big shoes to fill," he said. "Betty Gill and all the association presidents have done such a fabulous job. But I've got the help of the University alumni staff. They make the alumni association work.

"I'm looking forward to my term."—DB □

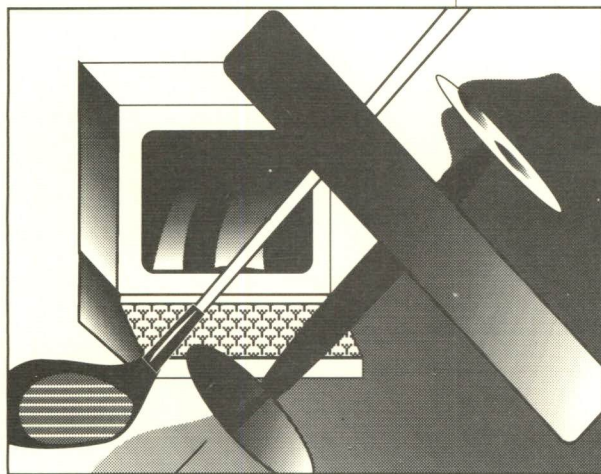
red lights. We have two red lights, and one of them is being replaced with a caution light! I live less than a mile from my office. Incomes may be lower than in an urban area, but there's a lot to be said for the other things in life."

Rural West Tennessee is UT-oriented, Townsend said.

"The public there supports the University of Tennessee. A lot of students go to UT Martin and some to UT Knoxville."

His family is a good example. His grandmother attended Hall-Moody, UT Martin's forerunner, and his mother is an alumna of UTK. His father, with whom the younger Townsend practices, is a graduate of Union University in nearby Jackson, Tennessee, and a trustee of Lambuth College, also in Jackson.

The new president is a pilot, a



NEWS FROM THE ASSOCIATION

The recent Mexican Riviera cruise sponsored by the NAA was the most popular in several years. Almost 70 alumni took the tour.

Yet to come this year are trips to the English countryside (August 22-September 3), Greece and Turkey (September 17-28), a "Great Rivers of Europe" tour (September 27-October 9), and a cruise on the Danube and to Istanbul (June 27-July 10).

For more information, call the Office of Alumni Affairs and Annual Giving at 615-974-3011.

Getting young graduates involved in alumni activities is difficult for all universities, UT included.

At UTK, the Office of Alumni Affairs has adopted a simple scheme of offering casual, low cost get-togethers in cities where there are large concentrations of the under 30 set. Young alumni in Memphis, Nashville, Knoxville, and Chattanooga have responded positively, and the Tri-Cities area is next.

"The gatherings are primarily social," says Martha Masengill, director of alumni affairs. "We send mailings to graduates of the last ten years inviting them to come. There's no formal program. We just encourage them to get interested in the University."

The program is a complement, not a competitor, to the National Alumni Association. It's hoped that young people who get involved through the young alumni meetings will also participate in NAA events.

Among the types of gatherings so far have been a pre-football party in the Neyland Stadium skyboxes, a taco dinner, a dance, a riverboat cruise, after-work socials, and a picnic in conjunction with the Orange and White game in Knoxville.

President Alexander has been hitting the alumni circuit, speaking to various groups. He has met with the NAA Public Affairs Committee and Past Presidents Council.

He also spoke at a recent meeting of the Knox County UT Alumni Chapter and was honored by the chapter at a reception.

**THANKS TO NEW
CONTRIBUTORS**

The *Tennessee Alumnus* is pleased to recognize new members of the University's major gift clubs.

The Benefactors Society honors those who give \$100,000 or more, while the Heritage Society recognizes contributors of \$50,000 or more. Presidents' Club membership is accorded those who give \$10,000.

The new members listed made gifts between November 1, 1988, and January 31, 1989.

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- Mr. and Mrs. Donald H. Jones
- Dick Broadcasting Company Inc.
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CARRY ON THE TENNESSEE TRADITION

☆Is a second or third generation of your family planning to enter UT (any campus) this year?

☆If your child is following in your footsteps as an entering freshman this fall (1989) — or perhaps even becoming the third generation of your family to attend UT — fill out the form below and mail it to the *Tennessee Alumnus* before July 30. We will recognize you for carrying on the Tennessee tradition.

☆In addition to the completed form, send a recent photograph of the student, the parent, and the grandparent (black and white preferred).

(Name of incoming student)

(Student's high school)

(Father's name and dates attended UT) (which campus?)

(Mother's name and dates attended UT) (which campus?)

(Grandparents' names and dates attended UT) (which campus?)

Street address

City, state, zip

Mail to:
 Tennessee Alumnus
 467 Communications Building
 Knoxville, TN 37996-0340

DEADLINE: JULY 30

University of Tennessee
National Alumni Association
Board of Governors

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**WOMEN'S COUNCIL
ENCOURAGES
INVOLVEMENT**

By Betty Gill
President
National Alumni Association

The basic purpose of an alumni association ought to be to provide a service to those former students who are no longer affiliated with the University on a daily basis.

Such has been the objective of the University of Tennessee National Alumni Association since its founding in 1836. The services, programs, and activities provided by the association are designed to allow alumni to develop a lifelong relationship with the institution.

The UTNAA Women's Council is one such program intended to provide a service as well as a means of identification with UT.

Founded in 1971, the Women's Council is a group of 16 women who annually plan and conduct four to six continuing education seminars across the state on topics of interest to female graduates and other friends.

When the Women's Council was created, few women served on the NAA Board of Governors and almost none as presidents of local UT alumni chapters. Presently, females comprise 28 percent of Board of Governors membership, and one out of five of more than 110 alumni chapters are led by women, demonstrating that alumni involvement objectives are being met.

This year's Council Chair, Annie Martin Mitchell of Sparta, Tennessee, and her colleagues have already conducted very successful seminars in Memphis, Jackson, Knoxville, and Nashville. Attendance was in excess of 1,500 persons and as usual, the evaluations by the registrants were very positive. Since September, Harriet Lerner, author of the best-selling books, *The Dance of Anger* and *The Dance of Intimacy*, has spoken to crowds of more than 1,000 in Memphis and Nashville. UT alumnus Lisa Ford of Atlanta, a leading speaker in professional training circles, spoke on the topic, "Professional Success — How To Get It," in Knoxville; and Cynthia House, vice president of the AIM Institute of Knoxville, chose as her subject, "Women and Self-Concept: Bluebird or Albatross," in Jackson.

Participation in Women's Council seminars has increased dramatically over the past couple of years and many female graduates have reunited with their alma mater through this program. Participants become better informed about the University and its alumni programs as a result of their exposure to Women's Council seminars. As a result, they have stronger feelings and a greater affinity for the University than before and the University benefits from this group of vocal advocates and opinion leaders. □

DANCING TOWARD DISASTER

'41

For those who liked to dance, 1941 must have been a wonderful year. Maybe it was because there were no VCRs and home pizza delivery, or perhaps it was a frantic rush to have a good time before war struck. But whatever the reason, dances, music, and partying seemed to occupy a goodly portion of students' time.

The year began on a down note when the football Vols, in their heyday under Coach Bob Neyland, were defeated by Boston College in the Sugar Bowl. The teams' prowess in the preceding seasons (three major bowl games in three years, 31 victories against only three defeats) lessened the impact of the defeat, though, and Vol Bob Suffridge won the Rockne Trophy as the outstanding lineman in the nation.

For the students who couldn't make the trip to New Orleans, color films of the entire game — plus scenic shots of the Crescent City — were shown at Alumni Gym. Admission was 25 cents.

Student spirit wasn't dampened for long by the footballers' foibles. It was time for mid-winter Nahheeyayli, a three-day extravaganza of dances with the war-inspired theme, "Musical Blitzkrieg." Music was by the popular Will Bradley dance band, and the decorations featured silver stars and airplanes.

Indeed war seemed to dominate campus thought. The 1941 *Volunteer* yearbook took "National Preparedness" as its theme and devoted an entire section to the military. Students and faculty were being called into the service, most notable among them Coach Neyland. The University offered Civilian Pilot Training courses, and the *Orange and White* student newspaper touted for greatness the first "coed" who enrolled.

There was an influenza epidemic on campus that left few untouched. The *O&W* published a regular infirmary list and reported University Hospital "filled to capacity."

"Kleenex is more prevalent than saddle shoes," a columnist quipped. When they slipped off their sad-

dle shoes, students often stepped into formal attire. Women's formals were advertised from \$8.98 to \$24.98 at Miller's, and men's "swanky tails" were going for \$25 at Fred Brown's. A party wardrobe was essential for not only Nahheeyayli (Tommy Dorsey and an up-and-coming vocalist, Frank Sinatra, entertained at the spring dances), but also the Military Ball, Barnwarmin', the Volunteer Beauty Ball, the Senior Ball, and numerous other festivities. There were dances at Whittle



Stepping out to one of the year's numerous dances.

Springs Ballroom (\$1.50 a couple in advance) and gatherings at Highlands Grill on Kingston Pike. Late night breakfasts came to a halt, though, when officials decreed women had to return promptly to their dorms after dances.

Informal evenings would likely find students at the movies, perhaps watching Mary Martin and Bing Crosby in *Birth of the Blues*, Fred Astaire and Paulette Goddard in *Second Chorus*, John Garfield in *East of the River*, or Mickey Rooney and Judy Garland in *Strike Up the Band*.

The city of Knoxville celebrated its sesquicentennial (1791-1941), and the ceremonies were highlighted by a historical pageant with about 1,500 players at Shields-Watkins field.

Religion exerted a strong influence on campus. Convocation, a passion play, and numerous religious programs and lectures attracted considerable student attendance.

Enrollment was about 3,250 at Knoxville, 300 at the Martin Branch, and 750 at Memphis. President James Hoskins was pleased with the prospect of a \$900,000 state operating appropriation for the coming year.

The Memphis campus was saddened by the death of R.E. (Pat) Haney, general student secretary of the University Medical Center and "the confidante of hundreds of students engaged in the study of medicine, dentistry, pharmacy, and nursing," according to the *Tennessee Alumnus*.

The Knoxville campus opened its doors in the spring for its eighth High School Day. Students and teachers from high schools throughout Tennessee were invited for events ranging from sports contests to a Latin competition. Also in the spring was the annual Senior Holiday, when the entire senior class left the campus behind and journeyed to Big Ridge Park for boating, picnicking, horseshoes, canoe races, and baseball.

Aloha Oe, the traditional candlelight senior farewell ceremony, featured the largest graduating class in University history — 497 seniors.

The merriment of the year came to an abrupt halt on December 7 with the Japanese bombing of Pearl Harbor. Never again did the music play as sweetly or the dancers step so high. — DB □



The football Vols completed their third straight undefeated, untied season. The senior line of Coleman, Shires, Molinski, Ackerman, Suffridge, Luttrell, and Cifers led the charge.

When East Meets West

By AMY SHARPE

Turkish nurses visiting UT Memphis find their profession vastly different from that of their U.S. counterparts.

About a year ago, Dean Michael Carter of the UT Memphis College of Nursing attended an international conference. Among the participants was the dean of the Florence Nightingale College of Nursing in Istanbul, Turkey.

The two struck up a warm friendship. Before they parted, Carter invited the dean and her faculty to visit UT Memphis.

Several months later, two professors from Florence Nightingale stepped off a plane at the Memphis International Airport. For the next eight weeks, Semra Erdogan and Anahit Coskun followed Dean Carter and his staff around as they introduced the pair to American nursing.

This is the story of what happened when east met west.

When Semra Erdogan and Anahit Coskun boarded a jet in Memphis to return to their teaching posts in Istanbul, they carried with them four bulky boxes loaded with two months' worth of research materials gathered while visiting the UT Memphis College of Nursing.

Considering the changes they hope to inspire in their home country's health care system, they were travelling light.

Erdogan and Coskun are Turkish Ph.D.s who spent eight weeks at UT Memphis finding out how the American health care system in general — and the American nurse in particular — delivers primary health care. "We want to use what we have learned to help solve Turkey's health problems," says Erdogan.

The two nurses face a considerable task. Turkish health care delivery needs:



DAVID SMART

Anahit Coskun feeds a tiny patient with help from a nursing student. Coskun and Semra Erdogan visited UT Memphis to observe and learn from American nurses.

- Better public education. In Turkey, patients "leave themselves to God." They have little knowledge about their own health or their health care providers.

- Improved technology. Computers have only lately cracked the business barrier in Turkey, and they are still just a dream in medical education and patient care.

- Well-defined protocols for nursing professionals. In Turkey, a nurse divides her time among patient care, janitorial work (or its supervision), taking part in doctors' examinations of patients, and endless paperwork.

- More education for nurses. "We have about 80 nursing schools and 44 midwife schools in Turkey,"

Erdogan says, "but these are all on the secondary level."

In other words, teenage girls skip high school and attend nursing school instead. The vast majority of Turkey's nurses have no college-level training when they join their profession.

Erdogan and Coskun are the exceptions. Both doctors of nursing, they are among an elite of only 150 nurses in their nation who have master's or higher degrees — not surprising for a country that supports just six schools of higher education "that are the equivalent of UT Memphis," they say.

"But we think that will improve," Coskun says. "We have master's and doctorate programs in our school, and we think the number of master of science nurses will improve."

With these goals in mind, Erdogan and Coskun made several side trips during their two-month stay, including Chicago, where they visited Rush University's College of Nursing; Washington, D.C., where they attended the American Colleges of Nursing meeting; and Gatlinburg, for a Tennessee Nurses Association gathering.

While at UT Memphis, they observed in-training programs, public health counseling, and bedside nursing.

"We have observed work in a primary care clinic, a public health center, nurse-run clinics, Headstart physicals, the MED, St. Jude Children's Research Hospital, Gailor Clinic, the Boling Center for Developmental Disabilities, the Shrine School for handicapped children, Baptist Memorial Hospital-East, and a nursing home," Erdogan says.

"The big difference between our two countries is this: We are still working to cure children's infectious diseases, like measles and tuberculosis, and malnutrition," she

comments.

Coskun agrees. "In your country, there is the teen pregnancy rate, drug abuse. We have no similar problems, no AIDS, not so much venereal disease."

Fay Russell, chief of nursing at the Boling Center for Developmental Disabilities and associate professor of maternal/child nursing, says the language barrier prevented much discussion. However, the Turkish nurses read English very well. As a result, they were anxious to obtain all the printed material they could.



Semra Erdogan and Parthenia Alexander Bowles check on a pediatrics patient. "There are many, many machines around a child here," Erdogan said, contrasting treatment in Memphis with that available in her native Turkey.

"I shared a lot of printed information on childhood handicaps with them, and that was probably the most helpful, apart from their seeing what we were doing in the Center."

Russell says Erdogan and Coskun visited her at the Boling Center three times.

"Semra and Anahit were interested in the way we put research

into practice, which included some of the newer technology," says Russell. "It added an extra dimension to our day to have them with us. They were really enthusiastic about little things that we take for granted."

"I gather that nursing is far less sophisticated in Turkey. They are pretty much where we were 30-35 years ago."

The CDD's early intervention program, which identifies and treats developmentally delayed children before their second birthday, caught the Turkish nurses' attention.

"A year ago we started working with infants whose mothers abused alcohol and drugs while pregnant," says Russell.

"Our program seemed a real eye-opener to Semra and Anahit. They were excited about what nurses are doing here."

The two Eastern observers say the prevalence of childhood disease, TB, and malnutrition in their part of the world prompted their interest in how American child health programs are set up.

"In Turkey, some children die of infectious diseases, and some adults," says Erdogan.

"Our aim is to teach them about health and child exams. There are many, many public health systems in Turkey, but we would like to observe, to find the best solution to our problem."

Rose Nealis, assistant professor of maternal/child nursing, says the Turkish nurses were surprised at the size and scope of LeBonheur Children's Medical Center when they visited her there.

"Turkey still has isolation wards for mumps and measles and things like that which we basically don't see in hospitals here," Nealis says.

The two nurses were perhaps most curious about the role nurses play in the American health care system.

"We need to learn the health system's organization, especially nursing's role in this system," Erdogan says.

Part of the reason for their fascination is the lack of prestige nursing carries in Turkey.

"My students were shocked when Semra and Anahit told them that nurses in Turkey clean the floors and prepare the food," Nealis says. "There is no such thing as a disposable nipple or bottle. Everything must be sterilized."

Coskun and Erdogan were surprised in their turn, too.

"We were amazed that Americans use syringes and throw them away. We have reusable glass syringes that we wash and use over and over again," says Coskun.

Turkish nurses also have little input into the medical hierarchy, carrying out virtually all patient care tasks only under doctors' orders.

"We saw American health department practical nurses who work independently and write prescriptions," says Coskun of their visit, "but we have no similar program. Generally we work by physicians' orders. We work separately only on bedside applications."

"They don't have the physical assessment skills that our nurses have," Nealis says. "Perhaps because of that, they told us they did not want their daughters to go into nursing because there was no respect for them. They think it's wonderful here, but basically Turkey operates on the diploma school model you saw here in the late '30s and early '40s."

Brenda Smith, associate professor of maternal/child nursing, says the two UT guests were anxious to take home some locally available technology.

"Turkey does not have all the methods of birth control that are available here," she noted. "Semra and Anahit were very interested in the contraceptive sponge. In fact, they took several dozen back. They thought the faculty at Florence Nightingale would be intrigued with them," Smith says.

If the Turkish nurses envy American nurses their autonomy, they also envy their abundance.

Despite a growing shortage of nurses in this country, American nurses are still far more numerous than their Eastern counterparts.

"There is a total of 65,000 nurses employed in Turkey," says Erdogan. "We need 100,000 more to fill the gap. At present, there is one nurse to every 1,561 people."

Part of the reason nurses are in short supply is that their duties, like housekeeping, cover much more than patient care.

But Turkish lack of technology overshadows the situation. Asked if there were anything from the United States they would like to

We were amazed that Americans use syringes and throw them away. We have reusable glass syringes that we wash and use over and over again. — Anahit Coskun

take back to Turkey, the nurses said their country critically needs monitoring equipment, particularly for intensive care units.

"We have some equipment in Turkey, but in America there is more improved technology. There are many, many machines around a child here," Erdogan says.

"In Turkey, we must observe all symptoms, all signs, by hand, by heart, by head, by sight, and by feel. There aren't enough machines.

"We saw American nurses sitting in hospitals, only writing. We are walking; we are running in Turkey."

The two say high technology is found only in a few private and university hospitals there.

"Nursing is very easy in the United States," Erdogan says, adding, "at least easier than Turkish nursing."

Erdogan and Coskun believe the

solution to the Turkish nursing shortage lies in improving working conditions and education.

"Nurses are generally tired, and many women and girls don't want to be a nurse. Their salary is not enough," says Erdogan.

They plan to use their experience in Memphis to compile nursing journal articles and to offer information to administrators at Florence Nightingale and other hospitals. They will also teach their students what they have learned. Both report a chronic shortage of Turkish nursing textbooks.

"We have to read some American and some English books," Erdogan says. "Some of our friends wrote Turkish books about nursing, but it's not enough."

Consequently, they spend much of their time translating English texts for their students. The UT faculty tried to help them collect a wide variety of printed material before the pair returned to Istanbul.

"I gave them textbooks, exams, syllabuses, modules, and articles," says Smith.

When it was finally time to say good-bye, Erdogan and Coskun both said they had not felt homesick for a moment during their stay in Memphis.

Instead, they were seized by a kind of nostalgia for the people they had met.

"We believe we will be homesick about Memphis," said Erdogan.

"Everybody was nice, helpful, kind, and friendly.

"When we chill, they brought us coats."

And did anything about the United States surprise them?

"Some people say to me, 'Don't walk alone, especially in the dark.' That surprised me," Coskun says.

"But more surprise is there were many good, new friends," Erdogan added, smiling. □

Reprinted from the Nursing Alumni Magazine of UT Memphis

TRADING PLACES

Women at UTK were ahead of their time when it came to asserting themselves.

More than a half century ago, women's activists were rare. But students at UT Knoxville came up with a way to give women the upper hand, at least for a few days.

The year 1938 saw the birth of a brief but popular campus tradition called Sadie Hawkins week. It was a turnaround from standard procedure when girls asked boys for dates and paid the expenses. Although the tradition didn't last long, it was the talk of the campus and a source of endless laughter and speculation.

At about the same time, similar events were springing up at campuses throughout the nation, spurred by the popularity of Al Capp's "Li'l Abner" comic strip. The students at UTK, though, claimed they had originated the idea, at least in its collegiate form. The October 5, 1938, edition of the student newspaper, the *Orange and White*, described the idea's origins:

"It all started a few days ago when, during a bull session at the corner drug store, someone complained that the boys had to do all the 'dirty work' and that it kept them broke asking the girls to dances and paying for rented cars. All in fun, someone suggested that Sadie Hawkins Day should be observed at UT."

Both men and women were involved in the initial planning for the event, which grew in scope and popularity in the succeeding weeks.

"Li'l Abner" was immensely

popular at the time, and Tennesseans, who were familiar with some of the character types spoofed in the comic strip, were particularly fond of it. Sadie was



A barefoot twosome at the Sadie Hawkins "backward" dance. The women arranged and paid for the dates.

the ugliest woman in Dog Patch, but her influential father was determined to help her get a husband. He set aside a day for a foot race when unmarried women could chase the town's eligible bachelors and got to keep the ones they

caught.

In the form it took at UTK, the Sadie Hawkins celebration spanned nearly a whole week, which included not only the race, but also a backward dance. The girls were to ask for dates, foot the bills, furnish transportation, and "even do the breaking at dances," the *O&W* reported. Girls were to "wear the pants" on campus for the week.

The object, according to the planners, was to show boys how girls wanted to be treated on dates and to relieve the males of date expenses for a week. There may have been a little more enthusiasm for the former intent than the latter. Actually, some girls may have been more interested in showing boys how *not* to treat females.

"My system for showing boys how girls want to be treated on a date is to let the boys see how it feels to be let down," said one.

"I can give the boys a chance to see how it feels to sit at home," said another.

Amidst the flurry of preparation for the week, which was endorsed by Dean Harriet Greve, came the added excitement of the possibility that Al Capp, originator of "Li'l Abner," might attend. Although Capp later decided to delay his visit until the following year, he wired his endorsement of UTK's Sadie Hawkins week to Teddy Bomar, one of the event's organizers.

It was a "swell" idea, Capp said. And he passed along an idea to make the dance even more festive.

"May I suggest that at the Sadie

Hawkins dance, the gentlemen insist on their rights and be provided by the ladies with expensive corsages!" he wrote.

Barbara Newman Bozeman ('43), recalls that there were corsages, but they turned out to be made of turnips rather than the "expensive" ones Capp suggested.

The entire Knoxville community got into the Sadie Hawkins spirit.

"It's taken hold, not only on the Hill, but all over town — this Sadie Hawkins week!" the O&W trumpeted.

The Knoxville *News-Sentinel* offered a loving cup trophy for the sorority selling the most tickets. The cup was displayed at Ellis and Ernest drug store, the campus hang-out. The Dixie Drive-It-Yourself



Males lost their traditional prerogatives in the pool room during Sadie Hawkins week.

System, headquartered on Gay Street, offered a 15 percent discount to girls renting cars during the week. Breezy Wynn's pool room, another student haven, reserved a day just for women. The only men allowed were those whose dates took them in. And East Tennessee Packing Company loaned the students a 90-pound white porker to pose as Li'l Abner's pig.

The dance at Alumni Gym highlighted the week's activities. Five hundred tickets were sold, and when all those were gone, more were printed. All the couples attending dressed like characters in "Li'l Abner," and faculty and townspeople paid to sit in the balconies and watch the show.

"It's hard to tell who's had the most fun, boys or girls, during Sadie Hawkins week," the O&W reported. "But one thing is certain. There will be a tremendous clamor for the same thing next year."

But, when it came time to decide about replicating the event in 1939, there were some around campus who were less than enthusiastic.

"It strikes at the base of the American home," one male sulked. "I can't think of anything worse."

And a female student snapped: "I think it's a waste of time and energy. Men are fickle and not worth it."

The naysayers may have had an



Miscellaneous arms were parked for safety's sake outside "Yokum Hall."

influence, because the event was scaled back to a two-day, Friday and Saturday celebration rather than an entire week.

The Friday afternoon race featured three members of each sorority and club group racing after football captain Sam Bartholomew.

Once again, the dance was in Alumni Gym, festively and temporarily renamed Dogpatch Lodge Hall. The visit by Al Capp was a feather in the cap of the planning committee.

"You bet, us'll be there," Capp wired from his Boston home. He joined in all the festivities with enthusiasm.

"I had the time of my life Friday night at Highland's (a Kingston Pike eatery and gathering spot) watching the girls worrying about paying the checks," he was reported as saying.

At intermission of the dance, Capp sketched some of his cartoon characters and signed hundreds of autographs.

The Dixie Drive-It-Yourself System, headquartered on Gay Street, offered a 15 percent discount to girls renting cars during the week.

Sorority members raced to catch "Li'l Abner."



The 1940 *Volunteer* described the grand march, "the event of the evening," when "all the women of Dogpatch dragged the men they had caught during the session before the mayor of Dogpatch to be legally hitched."

In 1940, the event was similar. The race was run in the Rose Hole, a sunken recreation area next to the present-day Ramsey's Cafeteria. Norbert Ackermann, football captain, was the catch. Prizes were carved out of polished walnut — a horseshoe for the race winner, a rolling pin for the best girl's costume, a jug for the winning boy's costume, and a pig for the organization selling the most tickets to the dance.

By 1941, with the military beginning to conscript many of the male students, the Sadie Hawkins celebration dwindled. The *Orange and White* reported a "backward dance,"



Couples entered the dance through "Mose's Cave."

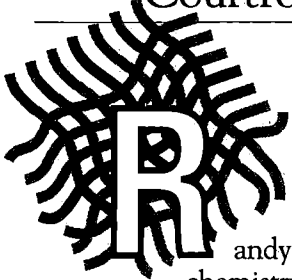
but no other events.

Although its history was brief, Sadie Hawkins week awakened an amazing amount of public interest. Male and female students alike enjoyed the "countrified" antics (although there were some men who complained when left sitting by the phone waiting for dates). Even today, Sadie Hawkins days still are celebrated occasionally, mostly at high schools. UTK, though, can always look back to 1938, when an idle conversation at the corner drug store started a tradition. — DB □

THE DEFENSE CALLS RANDY BRESEE

By VICKI JOHNS

Courtroom and classroom are familiar turf for this textile expert.

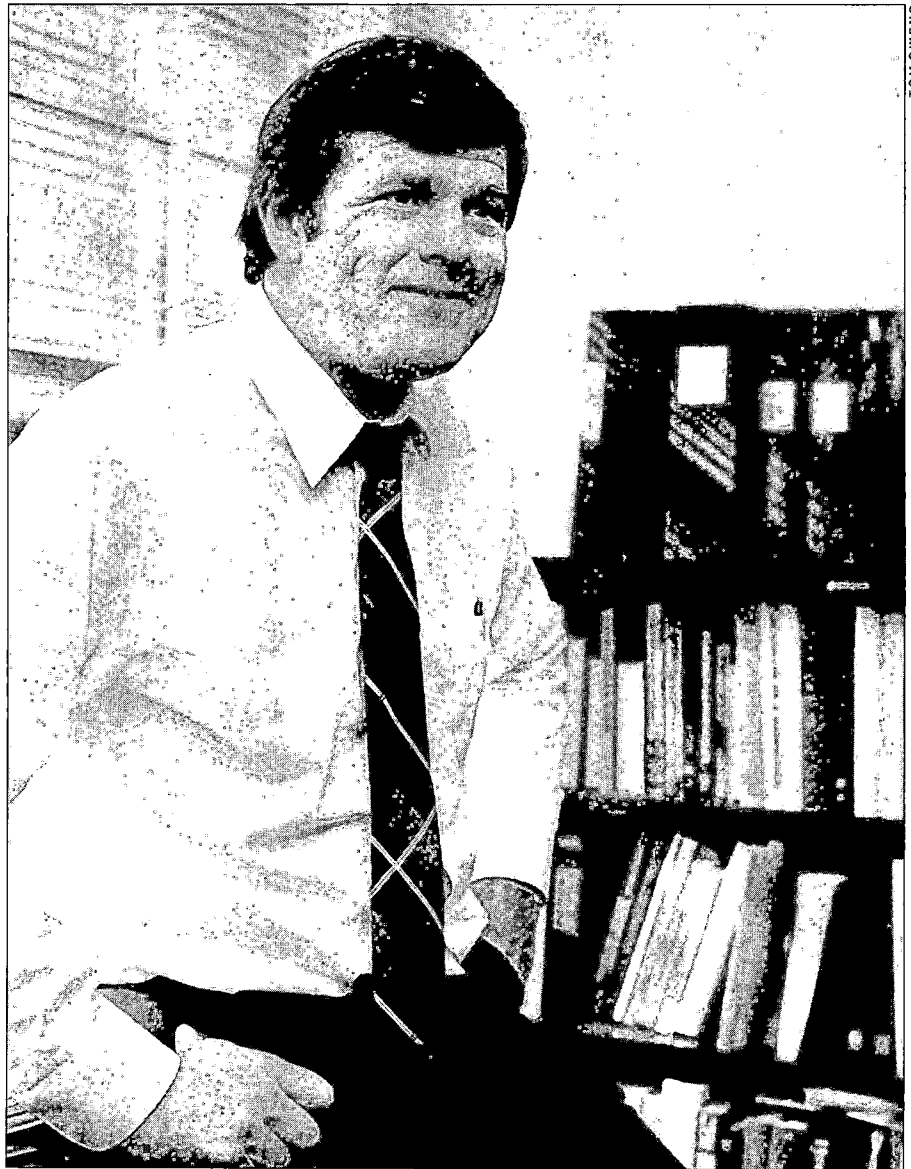


Randy Bresee uses chemistry in practical ways. He's a practical man, this associate professor of textiles in UTK's College of Human Ecology. He turned to the clothing and textiles field — after earning two chemistry degrees — so he could use his training and keep from starving.

"There was a recession on when I finished my second degree in chemistry, and I couldn't get a job. But I had a girlfriend who was a home economics major, and one day when I was waiting for her in the lounge of the home economics building, I found an inch-thick stack of job openings on the coffee table in front of me. About half of them were applied chemistry! I decided to go back to school and get a degree in textiles, because I wanted to apply the chemistry I knew."

His textiles training led him into the specialized area of forensic analysis — the study of fiber transfer and textile properties that can help pinpoint what happened at the scene of a crime.

"You lose fibers by the hundreds everywhere you go," Dr. Bresee says. "A scuffle between two people will result in their transferring fibers to each other, and those fibers can be analyzed. Because I did my first two or three analysis cases for the defense, I was labeled a defense witness. In that light, I ask, 'What if the accused did not commit this crime? How do you explain the



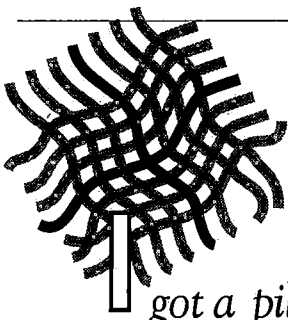
TOM OWENS

Involvement in such courtroom conflicts as Atlanta's Wayne Williams murder case has brought UTK's Randy Bresee international recognition as a textiles authority.

textile evidence the prosecutor has? I then check to see if any errors have been made in collecting and analyzing textile evidence."

Like any good investigator, Dr.

Bresee always keeps his skepticism about him, a trait that served him well during his work on Atlanta's Wayne Williams case in 1982. Williams was charged with the murder of two men whose bodies were found in the Chattahoochee River, supposedly covered with fibers from Williams' clothing. That didn't make sense to Dr. Bresee, who explains that you lose almost



I got a pillowcase, draped it on a stick and waded out in the river about 20 or 30 feet. I was hoping the weave of the pillowcase would filter fibers in the river.

all fibers transferred to you from another person after four to eight hours of normal activity.

"Those bodies had been in the river for three to five days. One of them was nude and the other was nude except for a pair of briefs. I thought, 'Now, wait a minute. These bodies have had water pounding against them day after day and have suffered what you call skin slippage, where the tissue underneath the skin has disconnected. If the skin will barely hang on the body, how could Williams' fibers still be attached?'"

Dr. Bresee also had another point to make: There are carpet mills all along the rivers in the Atlanta area, and the fibers could have come from them. So the prosecutors' claim that the river had been checked for fibers but none had been found aroused Dr. Bresee's suspicions even more.

"I did my own experiment. I got a pillowcase, draped it on a stick, and waded out in the river about 20 or 30 feet. I was hoping the weave of the pillowcase would filter out fibers in the river. So I just stood there for a while, filtering river water, to see if I'd catch any fibers. Then I went back to the lab and started counting them. I finally quit when I reached 400. That river was full of fibers, and I testified that it was the likely source of fibers on the victims. I think the prosecutors' arguments literally did not hold water!"

Despite Dr. Bresee's experiment, the prosecution continued to argue Williams' guilt on the basis of fibers found in his home, his car, and on the victims. He was eventually convicted and sentenced to life imprisonment.

Perhaps because of his work on the highly publicized Williams case and his articles in such publications as *Forensic Science International*, Dr. Bresee also was consulted by defense lawyers in the Australian "Dingo case" in 1982. Lindy Chamberlain was accused of murdering her infant daughter, but she insisted the baby was eaten by dingo dogs. The case drew international attention last

year when Meryl Streep played Chamberlain in the movie *A Cry in the Dark*.

The defense lawyers called Dr. Bresee while the case was being tried. Although no body had been recovered and no motive for the murder established, investigators had found the baby's ripped and bloodstained jumpsuit. The prosecutors were using this jumpsuit to build a case against Chamberlain. Their textile analyst, British forensics expert James Cameron, said the tears in the jumpsuit were caused by scissors, since dingo dogs could not make straight cuts with their teeth. The defense lawyers wanted to know how to establish the truth or falseness of this claim.

"I told them to get a jumpsuit like the one the baby was wearing, stuff it with hamburger, throw it to the dingos, and then retrieve the fabric and study the fractures to see if they cut it with their teeth or tore it to get at the hamburger," Dr. Bresee says.

"People don't understand that science takes time. The defense lawyers wanted to do the test the very next day. I explained it would take months to do it properly. The experiment had to be repeated several times to ensure the consistency of the results, and it couldn't be finished before the end of the trial. So they decided to take their chances in the courtroom, and Chamberlain was convicted."

But that wasn't the end of the matter. Dr. Bresee got another call from the defense lawyers after the conviction, and he advised them to have analysts in Sydney perform the hamburger test. They found that dingo dogs could indeed make scissorlike cuts with their teeth. However, each time the defense presented the evidence to the prosecution, Cameron would make a new claim that the defense analysts would have to refute. After three tries in a row, Dr. Bresee and the Australian analysts finally scored a victory: after finding inconsistencies in the way the prosecution had handled all types of evidence connected with the case, the Austra-

lian Supreme Court called Dr. Bresee to testify about the textile evidence. After seeing the documents and photographs of the tests compiled by the defense analysts and hearing Dr. Bresee's evaluation of the handling of the textile evidence, the Supreme Court agreed to reopen the case for examination. Chamberlain was pardoned by the government in June 1987, and in September 1988 a Darwin court overturned her conviction.

Doing forensic analysis in famous criminal cases is enjoyable because of the travelling and publicity, Dr. Bresee says. But intense cross-examination is stressful, and it's not pleasant seeing defendants convicted whom textile evidence seems to exonerate.

One such case was that of a Mississippi teenager charged with a woman's murder. Two children claimed to be eyewitnesses. The defendant, who had never been convicted of anything more serious than petty theft, denied the charges.

"The defense attorney asked me, 'If he did do it, what textile evidence should we find?' I told him that he should find the defendant's fibers on the victim. I analyzed the defendant's clothing to see how apt it was to lose fibers. I found that his clothing transferred more fibers than anything I'd ever seen in my life, yet they didn't find one fiber off his clothing at the murder scene. I estimated how many fibers you would expect to transfer, based on the weight of the victim, surface area of the fibers, and the viciousness of the struggle that supposedly occurred, and I also did a demonstration for the jury. I took the kid's jacket sleeve, wiped it on a black velvet board, and showed them how it left hundreds of fibers. But he was convicted."

In the less stressful area of historic textile analysis, questions and answers don't involve life or death, but Dr. Bresee's work still has quite an impact on our understanding of culture.

"There are many irreplaceable pieces of fabric that tell us about

our history and our culture. They shouldn't be lost. A fragment of fabric found on an archaeological dig may be thousands of years old, degraded by sunlight and bacteria, and museum curators may not understand how to preserve it. Sometimes textile conservators will ask me to analyze fabric and suggest how it should be handled. Or they will ask me specific questions like, 'What if you wet-clean this material; what are the benefits and what are the costs in terms of damage to it?'"

Dr. Bresee honed his interest in textiles and in forensic and historical analysis at Kansas State University, where he taught and did research for eight years before coming to Tennessee.

"People think of Kansas as the wheat state, but it's really cowboy country. I rubbed shoulders with the cowboys and learned to recognize a good fast horse. I did competitive steer roping and helped people drive cattle from summer pastures to winter pastures. I really enjoyed that cowboy culture."

He had to hang up his spurs, though, when new textile technology lured him to Tennessee.

"Things are really on the upswing here in Tennessee. In traditional textiles, you spin yarns and weave them. That's not a big growth area in the United States right now because it's labor intensive and, therefore, can't compete with foreign textiles manufacturers.

"But the textiles department at Tennessee has carved out a niche for itself in the innovation of non-woven materials. We're the only university in the world that has a melt-blowing facility on our premises for developing these non-woven fabrics. That's important, because commercial producers make these products and sell them, but they don't really understand the science of melt-blowing. They dump a polymer into the extruder and a fabric comes out the other end very quickly, but they don't quite understand how it happens. To improve the product and expand its uses, I wanted to do some work

in understanding and explaining the process, so I came to Tennessee to work on these problems along with other faculty.

"Non-wovens are good as disposable items because they are cheap to produce. If you go into the hospital, you'll find that disposable items — the surgeons' face masks, surgical gowns, patient drapes — are non-woven. And, because the texture of non-wovens is so fine, they have lots of surface area and can absorb things and filter things out. So, you find them in automobile air filters, oil filters, and water filters. When we better understand the process of making them, we can make them stronger or thicker or stretchier or whatever."

Dr. Bresee passes on some of his knowledge in his undergraduate textile testing classes, showing students how to measure properties of textiles that the layperson doesn't think about, such as strength, weight, abrasion resistance, wrinkle resistance, optical properties like dullness or luster, stiffness, and water absorption. At the graduate level, he teaches a course in surface analysis techniques, reviewing standard techniques and working with his students to develop new ones. This is particularly important in working with melt-blown fibers, he says, because the fibers' tiny size means that they have an enormous surface area to be analyzed.

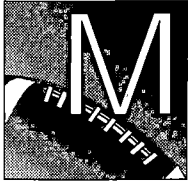
Because of the diversity of his interests, Dr. Bresee's future research plans could include anything from non-woven processing to more forensic analysis. But no matter what he tries, he'll probably tackle it with the same attitude he learned when he was handling wild horses in Kansas: "I've never been bucked off a horse. No, you'll never find a real cowboy who's been bucked off — they just conveniently decide to dismount, that's all." □

Vicki Johns is editorial assistant in the UTK Office of University Communications.

FAME AND FORTUNE

By TOM MATTINGLY

Bob Johnson's in the college football Hall of Fame, and his business fortunes are on the upswing, too.



More than 20 years after his last snap at Tennessee, the applause continues for Bob Johnson (UTK '68).

Earlier this year, the former Vol center and All-American was named Tennessee's 13th member of the National Football Foundation's College Football Hall of Fame. It's another in a series of honors for Johnson, who may well be the most decorated player in Vol football history.

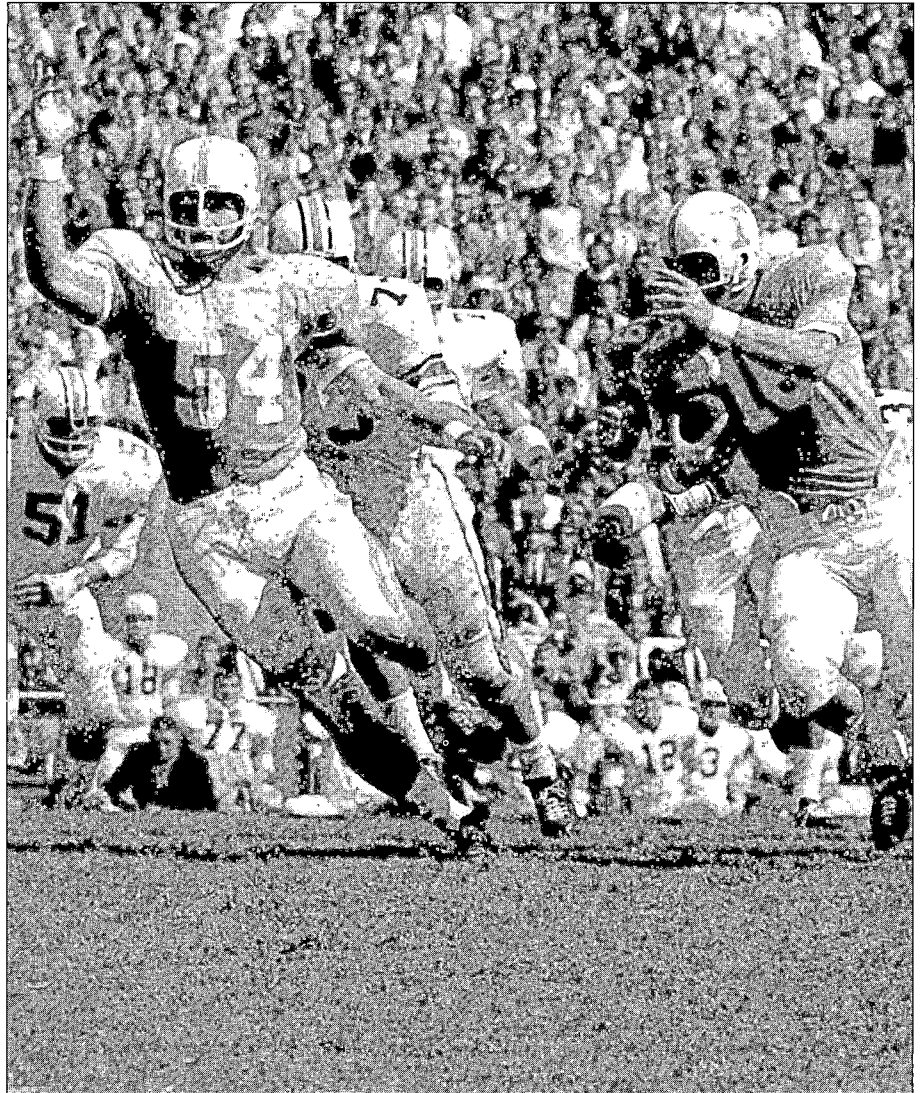
After 12 years with the Cincinnati Bengals, he's now president of Imperial Adhesives Inc., a Cincinnati-based firm that manufactures adhesives, solvents, finishes, and cleaners primarily for the footwear, automotive, furniture, and packaging industries. He's led the company since 1980 and seen its sales grow from \$8 million to \$23 million.

But he's also been a leader in the community, serving as president of the Greater Cincinnati Boy Scout Council, state chairman of the American Cancer Society, on the board of Junior Achievement and, most recently, on the board of the Cincinnati United Appeal/Community Chest fund drive.

Pat Harmon, sports editor of the Cincinnati Post from 1951 through 1985, praises Johnson.

"I can't think of a person who's displayed more outstanding qualities of community service," Harmon says. "He's very active in all areas of the community. People look up to him as a leader."

As a player, Johnson was part of the resurgence of Tennessee football in the mid-1960s under Doug Dickey. He earned All-SEC and All-American honors in 1966 and 1967.



In 1967, he won the Jacobs Trophy, emblematic of the SEC's best blocker, and was named the SEC's Most Outstanding Lineman by the Birmingham Touchdown Club. He played in the Senior Bowl and College All-Star game in 1968. He shared the Simpson Theatre Award as the team's most outstanding lineman with teammate John Boynton.

Johnson also did well in the classroom. During his senior year, he was named a National Football Founda-

Bob Johnson (number 54) blocks for Dewey Warren.

tion Scholar Athlete, receiving an engraved silver bowl and a \$500 graduate fellowship to the university of his choice.

He was an Academic All-SEC selection in 1966 and 1967 and earned Academic All-American honors in 1967, carrying a "B+" average in engineering. He also received the Knoxville Journal Trophy awarded to the senior with the high-

est academic average.

But Johnson thinks he could have done better.

"I would say my grades could have been better. A "B" average is OK, but I can't say I was a great academician.

"I graduated in engineering. If I had been in something like liberal arts, I probably wouldn't have done as well. I don't think I studied as much as I could have. In engineering I really believed that you didn't miss class, and I missed very few. If you listen well, you can solve the problems and pass the tests."

In 1968, he was the first player ever drafted by the Cincinnati Bengals. It was a surprise of sorts as Johnson had heard that the Chicago Bears, drafting sixth, were planning to take him as a defensive end. But Paul Brown, knowing his expansion Bengals had to be strong up front, beat the Bears to the draw and drafted Johnson.

He was captain of the Bengals 11 of his 12 years with the team. (He came out of retirement in 1979 when the team needed a long snapper at mid-season.) He is the only Bengal player to have his jersey retired.

That same year, Johnson was selected to *The Atlanta Journal's* All-Time Southeastern Conference team, joining Bob Suffridge, Steve DeLong, and Beattie Feathers as Vol representatives.

In 1975, he was selected to the All-SEC Quarter Century team along with former Vols Doug Atkins, John Majors, Ted Daffer, and George Hunt.

In 1988, he was named "Distinguished American" by the Cincinnati chapter of the National Football Foundation and Hall of Fame and this year was similarly honored by the East Tennessee Chapter. The award is given annually by Hall of Fame chapters across the country to a former football player who "distinguishes himself after his playing days as a community leader and who continues to promote the game of football."



FRANK PAINTER

Bob Johnson today is a community leader and successful businessman in Cincinnati.

It's been quite a journey for the young man from Cleveland, Tennessee, who was Doug Dickey's first recruit after his arrival on the Hill in late 1963. Johnson is quick to point out that Dickey is one of two men who have been significant influences in his life and career. Both are coaches — Dickey and Paul Brown — men Johnson sees as remarkably similar in character and ability, men whose examples he follows to this day as president of his own company.

"I look at the people I learned from," Johnson says. "I think Coach Dickey and Paul Brown are cut from the same cloth. They're analytical. They make decisions with their heads.

"They're both good, fair people. They don't play favorites.

"In our senior year, Walter Chadwick was a big-name player. But Coach Dickey gave him no sympathy when he had a couple of what I thought were moderately minor infractions of team rules. Coach Dickey gave him no slack, even though he was a starter and All-SEC."

Both Dickey and Brown built their offensive lines around Johnson and, within three years, the results were obvious. In Johnson's third year at Tennessee, the Vols won the SEC. In his third year at Cincinnati, the Bengals made the playoffs for the first time.

He is particularly proud of his offensive linemates at Tennessee.

"I really believe that, of any team I've ever been on, the 1967 offensive line was the heartbeat of that team," Johnson says. "No matter who played quarterback or who played running back, we had a fine running game. We ran the ball great against Alabama. When we got a team that couldn't stand up to us, it wasn't a game.

Against Tulane, we ran the same play eight of 10 times, maybe eight of 13 times, and were ahead 28-0 midway in the second period.

"That line — Boynton, Charlie Rosenfelder, me, Joe Graham, and Elliott Gammage — turned out to be a great one. Boynton was magnificent, probably better than his athletic ability would allow. You go back and watch those films and he was terrific. Elliott Gammage was a great athlete. If he'd been a tight end, he might well have been in the pros. I remember him outrunning Chadwick at 100 yards in the off-season.

"In different ways, Rosenfelder and Boynton were two of the most intense players I'd ever been around. Joe Graham was a very talented athlete who had a terrible knee. But it was a coaching coup that he ended up playing at that guard position. We didn't pull guards that much and it allowed him to play with a marginal knee."

Johnson carries the team concept into his business.

"I'm really enjoying this business. Another guy and I bought it five years ago. It's been challenging and fun. We're looking to become more and more a significant force in the



Doug Dickey, right, was Volunteer coach during Bob Johnson's playing days. Johnson ranks Dickey as one of the strongest influences in his life.

adhesive industry.

"In a lot of ways, I'm the head coach here. The ultimate responsibility lies on my shoulders. We're going through a reorganization, doing some things that are going to hurt some people's feelings. I've really been struggling with this. But I know it's the right thing to do.

"Last night, I said 'O.K. Johnson, you've got to make yourself do this because it's the right thing for the whole team.' Even though I struggle with hurting people's feelings, I sit and think, what would the people whose management styles I admire, like Coach Dickey and Coach Brown, do about this? They would bite the bullet and do what's right for the team."

Johnson was the consummate team player, and Brown recognized Johnson's contributions to the Bengals' franchise by retiring his orange and black number 54 jersey in a touching ceremony at midfield at Riverfront Stadium in 1979.

"You'd almost have to get inside Paul Brown's head," Johnson says about the retiring of his jersey. "I'm still the only Bengal with his jersey retired. I'm certainly not the best player the Bengals ever had. There's

Kenny Anderson and a lot of other people.

"It's terribly flattering. I think it had something to do with the fact that I was the first guy. I played a lot in those first years and helped get the franchise started."

After he retired from the Bengals, Johnson continued to be part of the team, serving as an analyst on the Bengals' broadcast crew.

"I was an announcer, but one without a lot of depth," he says. "I was sitting there watching my teammates play. I had a prejudiced audience, so I could be a cheerleader. I knew who the players were by the way they walked. I didn't even have to look at their jersey numbers."

Johnson says the significance of his Hall of Fame selection hit him when he realized the other Tennessee Volunteers who already were enshrined.

He joins legendary Coach Robert R. Neyland, current Vol Coach John Majors, Gene McEver, Beattie Feathers, Nathan W. Dougherty, George Cafego, Bowden Wyatt, Herman Hickman, Bobby Dodd, Bob Suffridge, Hank Lauricella, and Doug Atkins (the only former Vol enshrined in both the college and

pro football halls of fame).

"I've got to say I was genuinely surprised to be selected," Johnson admits. "There were a lot of people I would have perceived to be bigger names. I would assume there would be a lot more skilled position people selected than linemen. It's a real thrill for me."

Johnson looks forward to the Hall of Fame dinner in December in New York and hopes his son, a high school football player, can go, too.

"It would be a really neat night for him," he says. "It'll be exciting for me, too. I went 20 years ago as a scholar athlete. This time I'll be skinnier and have less hair."

Longtime UT trustee and Vol football observer Tom Elam sums up Johnson's strong points. "There's no young man I have ever known as a football player at Tennessee who would serve any better as a role model as an athlete, a student, and all around class guy. He's a great one." □

Tom Mattingly (UTK '70, '77) is editor of VOLUNTEERS Magazine, a publication of the University of Tennessee, Knoxville Athletics Department.



Here's Baby! Baby is a small brontosaurus living peacefully with her parents in the deep dark jungles of Ogbomosho—until she is discovered by the cruel Dr. Kiviat. Kiviat hopes to use Baby to advance his own scientific reputation, but he meets his match in a sympathetic zoologist, Susan Mathews, and her husband, George. Susan fears for Baby's life and, in a desperate jungle adventure, defends Baby from her evil pursuers.

EARLY START

You're never too young to enjoy good books.

You've stopped by the local library to get a book for your child. You're in a hurry and you're not quite sure what you want. The librarian looks fairly friendly, so you ask her to recommend a good book for your two-year-old. If you expect her

automatically to rattle off a few titles or hand you a list and point you in the direction of the children's section, you may be in for a surprise.

She may ask a lot of questions—how old is the child? What are his interests? What

By MARY SIZEMORE

Photograph by Don Dudenbostel

are you reading to him now? What are his favorite games and toys? Probably not until the librarian is satisfied she has a fairly clear picture of your child's interests and level of understanding will she suggest reading material.

In other words, if you're serious about choosing the right books for your child and you seek a librarian's advice, be prepared to spend a little time, because people who work with children's books love them and love to talk about them. And don't expect them to agree meekly with what *you* may think of a particular book or author. Children's librarians tend to be rather opinionated about the subject and don't mind sharing those opinions. Their strong feelings, however, grow out of a belief in the importance of children's literature in a child's educational and social development.

Professor Glenn Estes of UTK's School of Library and Information Science has definite ideas on the value of children's literature and the criteria for determining its quality. Estes, twice appointed to serve on the prestigious Newbery/Caldcott Award selection committee that chooses each year's most outstanding children's books, is recognized as an authority on children's literature. Teaching future librarians how to judge the quality of children's books is a primary component of his course, and in the process, he leaves little room for doubt as to his own opinions.

Estes' students can easily recognize the disapproving expression he assumes when discussing a book he finds unacceptable. There are certain books, he admonishes his classes, that "no self-respecting librarian would be caught dead with on her shelf." Students often laugh at the statement, but Estes is serious. His insistence results from his contention that good books are invaluable because they foster a lifelong appreciation of literature.

"I think a love of literature begins with exposing children to quality books starting in infancy. We can't wait until they're in kindergarten; we have to start in the home. If we can provide children with good books at an early age, we make readers out of them — people who appreciate language and can communicate in an articulate manner," he says.

Margaret Dickson (UTK '37, '40) longtime children's librarian at Knoxville's Lawson-McGhee Library, echoes Estes' assertion that children need to be introduced to books early on.

"It's never too soon to start reading to children," says Dickson. "Some women tell me they read to their unborn children. I'm not sure it does any good, but it certainly doesn't hurt!"

"When you read to very young children, there will be many words they don't understand. But they'll remember those unfamiliar words and recognize them the next time they're read. This helps develop a good vocabulary. And besides that, a great deal of bonding takes place between parent and child when they are reading together, which is valuable in itself."

Dickson believes good books also stimulate creativity and imagination. "They allow children to explore new ideas and experiences. Their wonderful imaginations let the characters be whatever the child wants them to be. Television doesn't allow this freedom," says Dickson.

Folktales, a perennial source of material for children's books, always have been popular. But the stories found in children's collections often are not the original tales, and these adaptations are unacceptable to many librarians.

"I have a problem with watered-down folktales," says Estes. "A child probably won't have the maturity to appreciate the authentic tale until he reaches the third or fourth grade.

"There was an awful period a few years ago in which children's writers tried to clean up the endings and rework parts of the tales to make them more 'palatable' for the child, or more truthfully, what adults *think* is more palatable," he says.

"The parents may feel better about the revised story, but the kids are confused. For example, in the Little Red Riding Hood story, children wonder how in the world Little Red Riding Hood emerges intact after the wolf who eats her is cut open — which didn't happen in the original story at all. It just doesn't make any sense, especially if the child has any notion of how the digestive system works," says the professor.

"Fortunately, there's an international effort now toward establishing authenticity in folktales, resulting in libraries holding better retellings of the tales in their collections," he says.

Dickson agrees. "Folktales were really meant for adults," she says. "I'm against cleaning up folktales to make them more palatable. If you can't take the real thing, don't take it."

Estes sees children's literature as a viable area of study apart from its role in child development.

"There is a body of literature intact which can be studied, and a systematic study of these works can help scholars establish criteria for determining what is good and what is bad literature," says Estes. "Also, I think children's literature is like adult literature in that it reflects the time in which it was written. Oftentimes, children's books are more precise than adult books in terms of presenting an accurate description of a particular period.

"A good example is Laura Ingalls Wilder. Reading her books is almost like seeing a photograph of the era. Adult literature isn't always so descriptive. For this reason, children's literature can be studied from a sociological standpoint as well."



TOM OWENS

Story time at Knoxville's Lawson-McGhee Library helps introduce children to good literature.

There's certainly no lack of literature available for study. Just take a look at the children's section of any bookstore and you'll see why trying to select the right book can be confusing.

Estes offers some practical advice for parents on choosing appropriate reading material. "I would suggest that parents use the excellent selection aids available that introduce them to the basic criteria for judging children's books. These sources help them understand the genres of literature available for different age levels.

"They also contain lists of books thought to be of quality by more than just one person. These lists contain the classics as well as contemporary works. *Choosing Books for Kids* by Joanne Oppenheim, Barbara Brenner, and Betty Boegehold and *The New York Times Parents' Guide to the Best Books for Children* by Eden Ross Lipson are two sources I recommend highly," Estes says.

"I also encourage parents to use professionally-trained librarians,"

he adds. "Parents often overlook the librarian as an aid in selection."

"When a parent asks me for help in choosing a book for a child," says Dickson, "I ask as many questions as I can without being nosy. I keep plugging away until I get enough information to be able to make suggestions."

But what if your child doesn't like what you bring home? What if he only wants you to read the same book over and over again? Or, if he already reads, what if he insists upon reading books you feel are mediocre at best?

Take the child's current reading habits as a starting point for encouraging better kinds of reading, Estes suggests.

"I've never believed in saying to a child, 'that's no good — don't read that.' Rather, the parent should be aware of what the child is reading, and know enough about children's literature to find a book that is similar to what the child likes — but of higher quality — and plug the better book in," he says.

"The librarian can be very help-

ful in these situations. Guiding a child to better material is what children's librarians are best at doing."

The worst-case scenario is, of course, that your child doesn't like to read, doesn't like being read to, doesn't like books. Period.

In that case, Estes says, don't give up. "My advice is to keep at it. Have books around, talk at the dinner table about a good story you've just read," he says. "But to be realistic, there are children who don't read and who will never read, and we need to accept that.

"John Rowe Townsend, a respected authority on children's literature, once wrote that there are times when children need to be on the playground, and there's nothing wrong with that. Townsend said we should respect these times," Estes says, "and not think that reading is the most important thing in life."

Enthusiasm about, and knowledge of, children's books is not limited to libraries. It can be found in retail bookstores, too. Pat Price, coordinator of the children's section at Davis-Kidd Booksellers in

Knoxville, takes her responsibilities seriously. She reads all the children's books she can and keeps tabs on the rest by constantly perusing publishers' magazines.

She's animated when she talks about children's books, frequently jumping up to take a book off the shelf, showing what's good about this particular author or illustrator, or not so good about that one. She points to certain classics with timeless appeal such as the Babar and Curious George books or *Anne of Green Gables*, which Price tries always to keep on the shelf.

"I'm happy to say these kinds of books always sell," Price says. "But kids don't automatically go for the good books; they need guidance."

Apple Tree Bookstore's Mary Ann Heffernan (UTK '85) has been working in retail bookstores for the past ten years — a period of remarkable change in children's publishing.

"There's been a tremendous upsurge in the number of books published for children," she says. "It was as if all at once publishers realized there was a large untapped market out there. Previously, children's books were almost solely marketed toward libraries, but that's changed now."

Recent years have brought marked changes in content as well. This change is most evident in non-fiction, according to Heffernan. The current popularity of dinosaur books is a perfect example.

"When I was a kid," says Heffernan, "there were many books about outer space and astronauts. At that time, space was mysterious; there were a lot of unanswered questions. Things that intrigued me as a child have been explained."

"Dinosaurs are compelling to children, I think, because they are mysterious and there's still much we don't know about them. Why did they disappear? Could a species suddenly disappear like that today?"

I've never believed in saying to a child, "that's no good — don't read that."

It's that unknown factor that fascinates them, and they're really sincere about wanting to know. It's not a frivolous interest," she says.

Heffernan read a good deal as a child. But when she began working in bookstores, she was surprised at the changes that had occurred since her childhood.

"There were still many of the old favorites, but there also was a whole body of literature out there I had never heard of. In the process of reacquainting myself with children's books, I discovered I loved them."

Adults can discuss the relative value of children's literature all day. But the important thing is — what do the kids think?

A visit to a children's book-reading session dispels any doubts that, for the most part, they love books. Myra Little reads children's books every Saturday at Knoxville's Apple Tree Bookstore. As she starts reading the first book, children that only moments earlier were chattering loudly and ignoring parental admonitions become quiet and intensely interested. Piped-in music and noisy customers do not distract the children's attention from stories about a green-nosed grandma who is really an alien or a little boy who takes his stuffed monkey shopping.

They offer unsolicited comments about the characters and relate events of the stories to their own lives, sometimes rather imaginatively. When Little begins reading about animals who live in the wild, four-year-old Ann says a

raccoon lives behind her house. Moments later, not to be outdone, Lauren, a tiny blond three-year-old, announces that a fox lives in her backyard. Little expresses proper amazement, and Lauren quickly adds, "But he's a nice fox!"

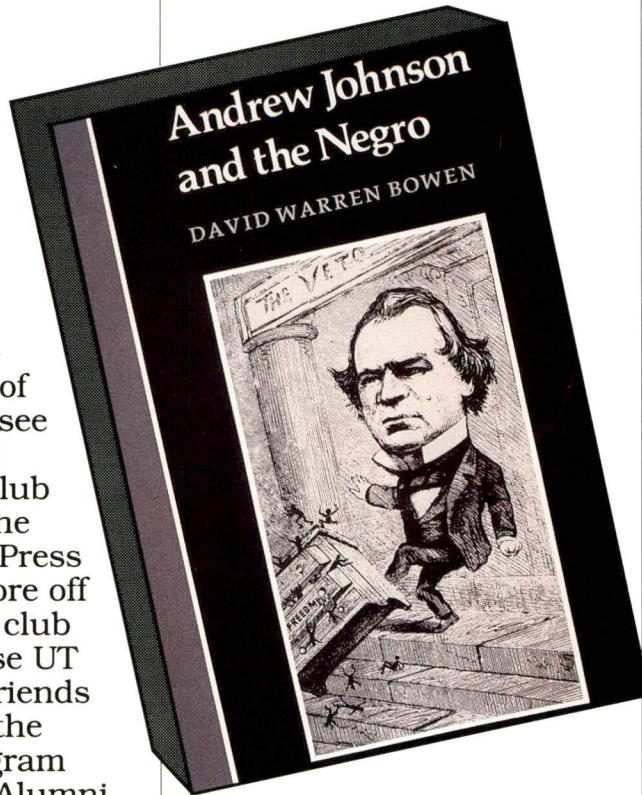
Perhaps that is why children's books are so special — they make anything seem possible. Unquestioning belief in the fantastic is a gift children have, a gift that regrettably dims as we grow older. Good children's writers understand the nature of a child's imagination and the wonderful worlds contained therein.

In accepting his second Caldecott Award, children's book illustrator Chris Van Allsburg expressed why he thinks the imagination is so vital — to adults and children.

Santa is our culture's only mythic figure, truly believed in by a large segment of the population. It's a fact that most of the true believers are under eight years old, and that's a pity. The rationality we all embrace as adults makes believing in the fantastic difficult if not impossible. Lucky are the children who know there is a jolly fat man in a red suit who pilots a flying sleigh. We should envy them. And we should envy the people who are so certain Martians will land in their backyard that they keep a loaded Polaroid by the back door. The inclination to believe in the fantastic may strike some as a failure in logic or gullibility, but it's really a gift. A world that might have Bigfoot and the Loch Ness monster is clearly superior to one that definitely does not. □

Mary Sizemore (UTK '80, '88), is a children's librarian in Charleston, South Carolina. She formerly was on the University Relations staff.

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