THE WHITE HOUSE

WASHINGTON

July 22, 1991

MEMORANDUM FOR THE PRESIDENT

THROUGH: DAVID DEMAREST
TONY SNOW TS

FROM: MARY KATE GRANT MKG

SUBJECT: NATIONAL ENERGY STRATEGY BRIEFING

On Wednesday, July 24, at 2:45 p.m., you will address a National Energy Strategy briefing in Room 450 of the EOB. Your remarks are 7-9 minutes in length, and will be on cards. The audience will be composed of energy industry leaders.

The briefing is being held because of Senate Energy Committee action on key elements of the National Energy Strategy; a mark-up was held in the House last week.

Grant/Blymire
A:ENERGY
July 22, 1991
Draft four

BRIEF REMARKS: NATIONAL ENERGY STRATEGY BRIEFING
ROOM 450
WEDNESDAY, JULY 24, 1991
2:45 P.M.

[Secretary Watkins, Senators Wallop and Johnston.] Five months ago -- I believe most of you were here with us that day -- our Administration announced a comprehensive and balanced strategy for an energy future that is secure, efficient and environmentally sound. Our National Energy Strategy is designed to meet needs this Nation can't afford to compromise: continued economic growth, increased energy efficiency, strong environmental protection, and reduced dependence on foreign oil.

This strategy relies on the magic of the marketplace, the resourcefulness of the American people, and the responsible leadership of industry and government. **And as we enter the Next American Century, this balanced approach will propel a larger and larger American economy -- in more and more energy efficient ways.**

Some have pushed for radical measures in order to reduce our oil imports -- measures that would hurt American industries, jobs and consumers. So we must act with care, but we must act comprehensively. **Our Energy Strategy strikes a balance -- a sound and reasonable middle ground that will achieve greater energy security without endangering the environment or stopping the economy cold.**

We start by using energy more **efficiently.** We must accelerate our research efforts -- to keep America on the cutting edge of **new energy technologies** like alternative fuels, electric cars, high-speed rail, solar and geothermal power, and safer and more secure nuclear technology.

Back in my younger days, I made my living looking for new energy sources, running a little oil company in Texas called Zapata. Today, we want to build an energy future that opens the door to even more **new and diverse energy sources** -- because America's energy future should never be at the mercy of foreign exporters.

As Secretary Watkins [and other briefers] will tell you, most of the initiatives contained in the Strategy can be implemented under existing authority -- and the Administration has already made much progress. We have set in motion a substantial part of our Strategy **already**, without waiting for legislation.

On the legislative front, we've made substantial headway since we released the Strategy last February. Under the leadership of Senators Johnston and Wallop, the Senate Energy Committee passed a comprehensive and balanced energy bill, one which embodies the key elements of our Strategy. **I urge the full Senate to act swiftly on this bill, which should win support from conservationists and industry alike.**

There's been a lot said about the Johnston-Wallop bill -- not all of it accurate. But let me tell you what it actually

does: on balance, it defines a very positive role in energy for the Federal government. It **enhances energy efficiency** -- in areas like building efficiency standards, Federal energy management efforts, energy conservation investments by utilities, and the development of new transportation technologies and alternative fuels.

On the supply side, it ensures access to the energy we need to sustain **continued growth** -- growth that is environmentally sound. We've made a lot of progress on cleaner-burning gasoline over the last few years. And in the bill before the Senate, we have encouraged the use of a whole range of environmentally sound fuels like ethanol, methanol, electricity, propane, and natural gas.

We anticipate that the Johnston-Wallop bill will reach the Senate floor after the August recess. The House began mark-up on the bill last week, and **we're hoping for the same comprehensive approach in the House as in the Senate.**

We need Congress to act wisely -- and act soon -- on this important domestic policy initiative. We need action on all fronts: to remain world leaders in technology; to protect the environment; to make the most of our domestic resources; and to encourage energy efficiency through incentives for industrial, commercial and private consumers.

Unfortunately, our critics can't see the big picture. They have focused on one or two issues that admittedly are controversial. ANWR is one of them.

Let me give you a little history. In 1980, Congress specifically **avoided** designating part of the coastal plain in Alaska, the Arctic National Wildlife Refuge, as "wilderness." Instead, Congress asked the Interior Department to determine whether the resources of ANWR could be developed without harming the environment.

Since then, Interior has conducted [more than 170 studies]. Time after time, these studies have shown that under strict environmental oversight ANWR's coastal plain and its resources could be developed safely. **The wildlife will be protected** -- John Turner, the Director of Fish and Wildlife, is here today -- and he has conducted rigorous studies. **The way of life will be protected**. And finally, the State of Alaska fully supports ANWR's development.

I urge Congress to look at these facts -- [more than 170 studies] and the considered opinion of Alaska's own government -- and not be distracted by the critics.

You're here today because you can make a difference in the energy future of this country. Some people act as if **Washington** can snap its fingers and impose an energy strategy on the rest of the country. We know that just won't work. The best part of our Strategy is that it draws upon America's **greatest national resource -- the ingenuity of our people.** With their resourcefulness, we can ensure that **America in the next century will be energy efficient, environmentally sound, and economically strong.**

To each of you, I say keep up the good work. Your support has been tremendous in this effort, and I hope I can continue to count on you. God bless the United States of America.

# # #

OK July 10th

THE WHITE HOUSE

WASHINGTON

SCHEDULE PROPOSAL JUNE 19, 1991

TO: KATHY SUPER
DEPUTY ASSISTANT TO THE PRESIDENT
FOR APPOINTMENTS AND SCHEDULING

THROUGH: DAVID DEMAREST DD
ASSISTANT TO THE PRESIDENT FOR COMMUNICATIONS

FROM: BOBBIE KILBERG BK
DEPUTY ASSISTANT TO THE PRESIDENT
FOR PUBLIC LIAISON

KATHY JEAVONS KJ
ASSOCIATE DIRECTOR FOR PUBLIC LIAISON

REQUEST: Drop-by briefing for constituent groups in support of the National Energy Strategy

PURPOSE: To demonstrate that the President considers passage of comprehensive energy legislation a priority and to seek industry support.

BACKGROUND: Since the President's announcement of the National Energy Strategy on February 20, 1991, the White House and the Department of Energy have been working with constituent groups to garner support for the Administration's proposal.

S.1220, the Wallop-Johnston Bill, is the Administration's vehicle of choice for passing the NES. It is important at this time that the Administration demonstrates its commitment to passing comprehensive energy legislation, and a Presidential drop-by would get this message across.

Both Sean Smeallie of Legislative Affairs and Bob Grady of OMB think this briefing would be beneficial at this time.

DATE AND TIME: June 26, 1991 (First Choice), or
July 10, 11 or 12. Note: it is important that the briefing occur before mark-up begins in the House, and possible Senate floor

consideration of CAFE legislation occurs in the second week of July.

Time: flexible

LOCATION: Room 450

PARTICIPANTS: The President
Henson Moore, Deputy Secretary of Energy
Linda Stuntz, Deputy Undersecretary, Policy Planning and Analysis, DOE
200 energy industry representatives

SEQUENCE: -- The President enters Room 450.

-- The President makes brief remarks.

-- The President departs Room 450.

MEDIA: Open Press

THE WHITE HOUSE

Office of the Press Secretary

For Immediate Release February 20, 1991

FACT SHEET:

THE NATIONAL ENERGY STRATEGY

President Bush today proposed a comprehensive and balanced strategy for an energy future that is secure, efficient, and environmentally sound. The National Energy Strategy is designed to diversify U.S. sources of energy supplies and offer more efficiency and flexibility in the way energy is consumed.

The National Energy Strategy is the product of twenty months of public recommendations and Administration consideration. In developing this strategy, the Department of Energy conducted eighteen public hearings and received thousands of written comments.

With the benefit of this input, the Administration analyzed the full array of energy options and has developed a strategy that will support continued economic growth, increase energy efficiency, protect the environment, and reduce America's vulnerability to energy supply disruptions.

The Strategy is consistent with the Administration's policy of reliance on market forces. Over the next two decades, the Strategy will make the U.S. more energy efficient and enhance our competitiveness without resorting to heavy-handed regulations, taxes, or import fees that can hurt consumers and cost Americans jobs.

The Strategy acknowledges that the U.S. is part of an energy interdependent world. It is not in our interest to adopt measures that may reduce imports, but inflict severe economic or environmental damage. Therefore, the National Energy Strategy balances economic, environmental and energy security objectives.

Over the next twenty years, this balanced approach to production and conservation will power a larger U.S. economy while using less energy. At the same time, the U.S. will produce more of the energy it uses. The National Energy Strategy by the year 2010 will:

- reduce domestic oil demand by 3.4 million barrels per day, below projected levels.

- increase domestic oil production by 3.8 million barrels per day above projected levels.

- increase the electricity produced from renewable sources, such as solar, hydropower, and geothermal by 16 percent.

- raise the use of alternative transportation fuels, such as compressed natural gas, ethanol and methanol, thereby reducing the need for approximately 2.0 million barrels of oil per day.

- reduce growth in electricity demand by over 10 percent, by unlocking market forces through elimination of costly regulation, thereby saving consumers approximately $27 billion in electricity costs in the year 2010.

The Strategy will also benefit the environment. Proposals to increase the use of clean coal technology, natural gas, and nuclear energy to generate electricity, as well as the development of new energy efficient technologies will:

- hold U.S. emissions of greenhouse gases by the year 2000 at or below 1990 levels.

- improve air quality by reducing emissions of pollutants that contribute to acid rain and smog.

- mitigate solid waste problems by reducing coal ash waste 25 million tons per year, and by lowering coal cleaning wastes by 50 million tons per year.

The Strategy incorporates and complements a number of Bush Administration initiatives. These include (1) the 1990 revisions to the Clean Air Act; (2) natural gas well-head decontrol legislation; (3) incentives provided to domestic renewable and fossil energy producers in fiscal year 1991 budget agreement; (4) the energy research and development initiatives announced in the President's FY 92 budget; (5) the Administration's domestic energy supply and demand measures adopted in response to the Iraqi oil disruption; and (6) the Administration's science and mathematics education initiatives.

To meet the challenges ahead, the National Energy Strategy calls on Federal, State, and local governments to work together to encourage energy conservation and new energy production through reduced regulation and streamlined licencing procedures, particularly in the natural gas, oil and gas pipeline and hydropower areas. At the Federal level, the Administration

intends to lead by improving the energy efficiency of federal buildings, federal housing and accelerating the purchase of alternative fuel vehicles for the federal fleet.

INCREASING ENERGY AND ECONOMIC EFFICIENCY

Transportation Efficiency

Highlights

The National Energy Strategy will increase transportation efficiency by:

- requiring centrally-fueled fleets to purchase vehicles capable of using alternative fuels, such as compressed natural gas, ethanol and methanol.
- increasing Federal purchases of alternative fuel vehicles.
- increasing the Corporate Average Fuel Economy credit that automakers currently receive for producing alternative fuel vehicles.
- promoting State and local government and private-sector programs that offer a "bounty" for scrapping older, high pollution, gas guzzling cars.
- increasing use of public transit, vanpooling and ridesharing by raising the limit on tax-free commuter subsidies that employers can give employees.
- proposing to invest a Federal share of up to $150 million from FY 92 to FY 96 in a new research program with the automobile industry to accelerate the development of electric vehicles.
- accelerating R&D in new energy efficient technologies, including high performance aircraft engines, vehicle propulsion systems, MAGLEV and high-speed rail and by widely implementing Intelligent Vehicle/Highway systems.

These measures are projected to save the equivalent of 3.0 million barrels of oil per day by 2010 without the harmful effects of higher taxes, oil import fees, or unjustifiable CAFE levels. The Administration has commissioned an independent study by the National Academy of Sciences on feasible fuel economy levels. The number of passenger miles driven is estimated to increase by 60 percent by 2010; however, under the Strategy the volume of gasoline purchased by consumers is projected to fall by 13 percent.

Electricity Generation and Efficiency

Highlights

The National Energy Strategy will raise electricity efficiency by removing barriers to greater competition that currently raise the cost of electricity and by encouraging energy efficient investments by utilities and consumers:

- amending the Public Utility Holding Company Act (PUHCA) to allow power suppliers to build, own and operate power facilities in more than one area.

- supporting state and utility efforts to invest in energy efficiency as an alternative to power plant additions (Integrated Resource Planning).

- reforming the Public Utility Regulatory Policies Act (PURPA) to modify size and fuel use restrictions for small power producers.

- providing tax-free treatment of utility discounts on consumers' electricity bills for efficiency investments.

- expanding access to electricity transmission for utility and non-utility wholesale buyers and sellers.

- reducing Federal subsidies for the debt of Federal Power Marketing Administrations.

These measures are projected to reduce electricity demand growth by over 10 percent in 2010 and save consumers $27 billion in electricity costs in the year 2010.

Residential and Commercial Building Efficiency

Highlights

The National Energy Strategy will raise efficiency levels for residential and commercial buildings by:

- accelerating R&D for building technologies by increasing Federal funding to $55 million in FY 92, a 22 percent increase.

- encouraging providers of home mortgages to share energy efficiency ratings with prospective home buyers.

- setting cost-effective energy efficiency standards for appliances and equipment as provided under current law.

- expanding energy efficiency labeling programs to include

certain other equipment including light bulbs.

- o develop and encourage the use of cost-effective building efficiency standards.

These measures will reduce building energy demand. The amount of floor space in malls, office buildings, and other commercial building is projected to grow by 57 percent, but the energy needed to heat, cool, and light that space will grow by less than half that amount. In the year 2010, the U.S. is forecast to have 24 percent more occupied housing than today, but will use only 10 percent more energy to service that housing.

Industrial Energy Efficiency

Highlights

The National Energy Strategy will raise industrial energy efficiency by:

- o increasing research and development for industrial waste reduction and recycling.
- o encouraging the use of industrial energy audits at the state and local level.
- o modifying existing regulation where needed to ensure that the use of waste minimization technologies is not discouraged.

By the year 2010, industrial output is projected to grow 80 percent; yet if the Strategy is implemented, the United States is projected to use only 27 percent more energy to power our factories, plants, mills, and similar facilities. In addition, the negative environmental impacts of industry will decline.

SECURING FUTURE ENERGY SUPPLIES

Securing Petroleum Supplies

Highlights

The National Energy Strategy will reduce our vulnerability to oil supply disruptions by:

- o encouraging oil production in other countries outside the Persian Gulf.
- o expanding worldwide strategic petroleum stocks available to offset future oil supply disruptions, including our

Strategic Petroleum Reserve.

- o expanding joint Federal/private investment in advanced oil recovery technology by increasing Federal funding in FY 92 by 24 percent to $52 million.

- o providing environmentally responsible access to areas of the coastal plain of ANWR and resolving technical and regulatory barriers to greater Alaska North Slope oil development.

- o allowing environmentally responsible access to Outer Continental Shelf areas, consistent with the President's decision last year.

- o deregulating oil pipelines in competitive markets.

- o increasing production of California heavy oil and allowing access to export markets.

- o evaluating the refining sector's ability to meet future demand for a variety of liquid fuels.

These measures will increase domestic oil production by up to 3.8 million barrels per day in 2010, and raise economically recoverable resources by 25 to 70 billion barrels.

Securing Natural Gas Supplies

Highlights

The National Energy Strategy will promote domestic and international natural gas production by:

- o streamlining gas pipeline construction reviews and developing more efficient environmental review procedures.

- o deregulating pipeline sales rates in competitive markets and reforming gas pipeline rate designs.

- o supporting environmentally responsible exploration and development in certain offshore areas, consistent with the President's OCS decision last year.

- o improving third party access to gas pipeline transportation services.

- o eliminating certain import/export regulations on natural gas.

- o expanding use of natural gas in alternative fuel vehicles.

These measures are projected to save up to 600,000 barrels of oil

per day by 1995, and increase natural gas consumption by almost 1 trillion cubic feet in 2000. Residential consumers are projected to save $200 million in 2000 and $850 million in 2010 in reduced costs.

Securing Future Coal Supplies

Highlights

The National Energy Strategy will promote the use and export of clean coal resources by:

- accelerating use of clean coal technology through Federal and State regulatory incentives.
- clarifying the applicability of the Clean Air Act to refurbished power plants.
- creating favorable export markets for U.S. coal and coal-burning technologies.
- removing barriers to constructing coal slurry pipelines.
- pursuing research and development on environmental protection during mining.

These measures will allow the U.S. coal industry to capture a major share of the growing international coal and coal technology markets, while improving our ability to more cleanly and efficiently utilize the large U.S. supplies of low cost coal.

Securing Nuclear Power

Highlights

The National Energy Strategy will promote the ability of nuclear power to meet electricity needs by:

- reforming and streamlining the nuclear plant licensing process, as well as the process for siting and licensing of waste facilities.
- developing standardized designs for "next generation" power plants, so that the licensing process is not delayed and financial risks are reduced.
- accelerating research and development of "next generation," passively safe design nuclear reactors.

These measures will enhance the ability of nuclear technology to meet electricity needs by reducing costs and increasing safety and reliability. Nuclear power production could increase by 10

percent over levels otherwise projected for the year 2010.

Securing Renewable Resources

Highlights

The National Energy Strategy will promote the development and use of renewable resources by:

- extending the current investment tax credit for renewable energy technologies through 1992.
- streamlining hydropower licensing processes at existing dams and eliminating unwarranted Federal regulation of small hydropower projects.
- amending PURPA to encourage renewable power production by small power producers.
- supporting conversion of municipal solid waste to energy as part of a comprehensive waste management strategy.
- developing cost-competitive liquid fuels from non-food crops with new research and development support.

These measures will increase electricity generation from renewables by 16 percent in 2010. In addition, they would reverse the losses of hydropower generation capacity and increase fuel and technology choices for transportation.

Securing Fusion Technology

The National Energy Strategy will intensify international collaboration in fusion research and focus investments in magnetic and inertial confinement reactor concepts.

Through these efforts a demonstration plant could be developed by 2025 and an operating commercial plant could cost-effectively supply power by 2040.

Enhancing Research and Development for Energy Security

The National Energy Strategy includes a major commitment to advanced energy technology. The FY 92 budget includes $903 million, or 34 percent above 1991 levels, for increased investments in support of National Energy Strategy research and development initiatives.

To ensure that research and development efforts pursue useful goals and result in ultimate commercialization of technologies, these initiatives will utilize industry cost-sharing and will be carried out as joint government-industry programs. In addition,

a national awards program will be created, offering prizes for energy-related innovations that meet specific technological challenges.

Major research initiatives include: advanced transportation fuels from biomass, vehicle propulsion technologies, electric vehicle technology, aeronautical technologies, high speed rail and magnetic leviation, intelligent vehicle/highway systems, telecommuting, air traffic control, advanced oil recovery technologies, industrial technologies, and advanced light water nuclear reactors concepts.

By 2030 these research and development initiatives could save between 5 million and 8 million barrels per day of oil equivalent.

ENERGY AND THE QUALITY OF AIR, LAND AND WATER

Highlights

The National Energy Strategy will enhance environmental quality by:

- increasing the use of natural gas, renewable energy sources, and alternative fuels.
- improving energy impact assessments in federal regulatory proceedings.
- developing model programs for energy facilities siting.
- minimizing waste from energy production, transformation, and use.

These measures, in conjunction with the Clean Air Act Amendments, are projected to reduce sulphur dioxide emissions by 40 percent, nitrogen oxides by 30 percent, and volatile organic compounds emissions by 25 percent from projected levels by 2030. In addition, they will improve the economics and efficiency of environmental compliance, which currently costs over $100 billion per year and is rising.

ENERGY AND THE GLOBAL ENVIRONMENT

The National Energy Strategy and previous Bush administration actions, coupled with ongoing Federal research aimed at reducing scientific uncertainty on the potential for global climate change, will reduce greenhouse gas emissions and demonstrate U.S. international leadership on this issue.

In 2000, U.S. greenhouse gas emissions are projected to be at or below their 1990 levels, despite steady increases in U.S.

economic growth.

FORTIFYING FOUNDATIONS: Science and Engineering Research, Technology Transfer, Science and Math Education

The National Energy Strategy will continue the administration's commitment to science and engineering research, technology transfer, and science and math education by:

- o increasing the Federal investment in the nation's basic science research portfolio to over $12 billion in FY 92.
- o re-aligning Federal research and development priorities to better serve National Energy Strategy goals.
- o ensuring the viability of world class U.S. facilities and pursing international agreements to support high-cost facilities.
- o increasing industry participation in research and development and commercialization.
- o protecting intellectual property rights.
- o promoting technology exports.
- o promoting the Administration's commitment to math/science education through, for example, strengthened curriculum; Federal technical assistance and training for teachers; and broadened public science literacy programs.

LEGISLATIVE PACKAGE

A legislative package to implement National Energy Strategy measures that require statutory change will be transmitted to Congress shortly. As an addition to that legislative package, the Administration will propose bringing the Federal Energy Regulatory Commission (FERC) into the Department of Energy.

THE WHITE HOUSE
WASHINGTON

Oil & gas industries are moving ahead to introduce cleaner burning gasoline & alt. vehicles

CA, TX, CO, NY & other states active programs to reduce oil consumption by switching to other fuels

THE WHITE HOUSE
WASHINGTON

Eggy
586-6210

effect of keeping all greenhouse gas emission levels at 1989 levels after 2000.

will maintain ~~x~~ at 1989 levels.

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not so much stopping as reversing

reversing deterioration of US oil production

increase use of domestic nat. gas

expanding energy technology.

~~Nuclear~~

reversing trend to heavy dependence on foreign oil.

To Carol B.

Date 7/18 Time 1 pm

WHILE YOU WERE OUT

M Vito Stagliano

of Heason Moore

Phone Dept. of Energy

Area Code Number Extension

TELEPHONED		PLEASE CALL	
CALLED TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		URGENT	
RETURNED YOUR CALL	✓		

Message 586-6660

Asso. Dep. Under Sec. for Policy Analysis

Operator

AMPAD EFFICIENCY® 23-023 CARBONLESS

To CAROL

Date 7/18 Time 11:30

WHILE YOU WERE OUT

M Mr. Stagliano

of

Phone 586-6660

Area Code Number Extension

TELEPHONED		PLEASE CALL	
CALLED TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		URGENT	
RETURNED YOUR CALL			

Message re: talking points on next week's nat'l energy strategy speech

Operator

AMPAD EFFICIENCY® 23-023 CARBONLESS

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biological studies
have concluded we
can proceed w/ devel. in
an enviro. sound matter.
Interior signed off

Since 1980, when Int. had to research ANWR – we conducted ~~studies~~ and evaluated more than

441 bio studies
of ~~species~~ ~~related~~ nat.
resources pertaining to
ANWR. environmental values of →.

1987 concluded
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Jim Hughes → Dir. of Cong & Leg Aff
208-7900 Asst to Sec.

DOE 586-6210
Linda Stuntz > should be back around 1pm
586-5316

586 4159 - Peter Saba
↓
delete that part
re: "credible" definition

But far more important than the duration of the official relationship are the innumerable personal ties between Americans and Danes and the values that we share. For more than a generation—in fact, as long as I can remember—the United States and Denmark have been partners or have otherwise cooperated in many fields. We need only mention our membership with the United Nations and our partnership in NATO that remain two of the fundamentals of the foreign policy of both our countries.

The Prince Consort and I have just spent 2 delightful days at Williamsburg. Though the distance between the capital of colonial Virginia and Washington, DC, is short, it is nevertheless a journey in time, for it spans the history of the United States from early republican time to the present day. And it is striking how all through the years one thing has remained unchanged: the dedication of your country and its people to the ideals proclaimed in the Declaration of Independence and enshrined in the Constitution of the United States. Those ideals are values that we share.

And however troubled the present times may be, it is heartening to see how the dedication to common values is able to rally so many nations of the international community when the United Nations calls upon them.

Mr. President, the reception which you have given to me and the Prince Consort here just now makes an impressive beginning to our stay as your guests. Thank you very much.

***Note:** The President spoke at 10:14 a.m. on the South Portico of the White House, where Queen Margrethe was accorded a formal welcome with full military honors. Following the ceremony, the President and the Queen met in the Oval Office.*

Remarks at a Briefing on Energy Policy
February 20, 1991

Thank you all very much. Thank you. Please be seated. First, let me welcome the Members of Congress who are here—Congressman Dingell and Congressmen Lent, Sharp, and Moorhead; Senators Wallop and Johnston—and a special welcome to them. I want to say that we want to work with them as the legislative process goes forward.

Let me also pay my respects—in looking around, I'm told that Governor Hickel is here. Whoops, there he is—Wally, welcome. And Governor Ashcroft, Governor Sinner. Of course, our man of the hour here, Jim Watkins, our very able Secretary. Governor Sununu, who's been working on this with all of us. Henson Moore, from—the Deputy at the Department of Energy—made an outstanding contribution to this. And, Linda Stuntz, thank you. And Sheila Watkins. And I thought—Clayton—Secretary Yeutter and Secretary Skinner and Secretary Lujan are all with us. Mike Boskin was to be. Mike Deland is here from the CEA. I have a method to my madness here in getting around to all of this.

Senator, welcome to you. I didn't see you earlier. And to Hank Habicht of EPA, and Jim Thompson, a former Governor, and former Governor Jim Edwards over here. Jim Thompson is uncharacteristically in the back of the room now that he's in private—[*laughter*]——

But nevertheless, I cite all these names because this is an issue that has great appeal across all kinds of Departmental lines. It's something that is really essential—a national energy strategy, and I want to announce it today. I believe it is a strategy for future—an energy future that is secure, efficient and environmentally sound.

I want to thank Admiral Watkins and also acknowledge and thank the efforts of so many. We now have, thanks to all, a carefully balanced energy strategy, and it is designed to diversify America's sources of energy. It's designed to encourage efficiency and conservation, spur competition throughout the energy sector, give Americans greater choices among fuels, and enhance U.S. research and development in new technologies.

The driving force behind this strategy is straightforward. It relies on the power of the marketplace, the common sense of the American people and the responsible leadership of industry and government.

Every American will benefit from the policies that we're laying out here today. Over the next two decades, this strategy will make us more energy efficient without new energy taxes. It will mean savings for consumers in energy costs. And it will improve our energy security and reduce our vulnerability in the years ahead.

Let's talk about reality here. We've already made progress toward reducing that energy vulnerability. We've diversified our suppliers so that we are not unduly reliant on any single source. What's more, through the Strategic Petroleum Reserve, we've vastly improved our ability to respond flexibly to supply interruptions. And we have already begun moving on the path toward improved energy efficiency.

But we are, I will be the first to concede, a long way from total energy independence. Our imports of foreign oil have been climbing steadily since 1985 and now stand at 42 percent of our total consumption. Too many of those oil imports come from sources in troubled parts of the world.

We know that for domestic oil production, certain areas are off-limits, and justifiably so, for sound environmental reasons. But developing new, alternative energy sources takes time. Some sources of power face political problems. So, America will have to continue to import energy for years to come.

We also know that unwise and extreme measures to reduce oil imports would seriously hurt the consumer in this country and will adversely affect the working man and woman in this country—American jobs and American industries. In the face of these realities, we must act with care, but we must act comprehensively. Our national energy strategy strikes a sound and reasonable balance, and it will achieve greater energy security without unduly burdening the consumers or the economy.

To minimize our vulnerability to foreign oil, the disruptions that come from reliance on foreign oil, this strategy takes a multifaceted approach. It will help us to find more reliable sources of energy through uncompromisingly safe and environmentally sound development. Domestic oil production will rise by 3.8 million barrels a day.

This strategy will also help us use energy more efficiently by encouraging new technologies, alternative-fueled vehicles, and conservation. With this strategy, we're working to give Americans unprecedented choice and flexibility. Instead of only finding gasoline at the corner station, we want Americans to be able to choose from a range of environmentally sound and cleaner fuels like ethanol, methanol, electricity, propane, natural gas, and cleaner gasoline.

Where America's towns and cities were once able to buy electricity from only one utility company, we want to help spur competition in the electric power business and to bring lower prices to consumers. And we plan for electricity produced from renewable sources to rise by 16 percent.

We want to build an energy future that is based on a range of diverse sources, so that never again will this nation's energy well-being be swayed by events in a single foreign country. Our approach will give Americans the flexibility, the opportunity, and the knowledge that they need in order to conserve or to change fuel sources and to cut their energy bills.

And finally, we are convinced that this strategy will keep America on the cutting edge of new energy technology. It promotes partnerships between industry and government for accelerated research in technologies like biomass and alternative fuels, or electric vehicles, high-speed rail, renewable sources like solar and geothermal power, and nuclear technologies of unprecedented safety and security.

Together with the recently-passed Clean Air Act, this National Energy Strategy will maintain an uncompromising commitment to energy security and environmental protection. And it will put America on the road to continued economic growth. We are not going to have an energy strategy that assigns the status quo to the American worker in this country. We're going to continue to grow, and we can do it soundly. And that's what this energy strategy proposes.

Nobody should assume that meeting our needs for abundant energy, a strong economy and a sound environment is going to be easy. I've just met with these Congressional leaders, these leaders in the energy field, and we've talked about this. It isn't going to be easy. But I will say that this strategy strikes a delicate balance. As always—and

we're used to that—there will be critics in every corner, but none of them will propose a plan that is more comprehensive or, in my view, more carefully thought out.

So, I believe that this is a good strategy because, along with our abundant natural resources, it draws on our resourcefulness, our nation's remarkable resourcefulness. From the company that finds more energy-efficient ways to do business, to the scientist who makes a new power source practical, to the individual American at home who finds some new way to save energy, I think we can rely on the most remarkable source of power that the world has ever seen—and that's the American people.

So, I fully endorse this. Senator Wallop gave me a little good advice yesterday that Chairman Bennett Johnston concurred in, and that is that if we are going to get this National Energy Strategy fully adopted and the legislation that's necessary enacted, that the White House—and they were looking at me when they said this, the President—must be fully involved. And so I look around this room and I see many people to whom I'm grateful for your commitment to a sound energy strategy. And I just wanted to conclude by telling you that the White House and the President will be strongly involved in trying to implement the legislation, help put through the legislation that is essential to this strategy.

There are some things I think we can do to empower the executive branch. But to get this done right and to get it done the way we must, it's going to require a lot of give-and-take, it's going to require a lot of consultation with the Congress. And I just wanted to pledge to all of you interested in this today that I will do my part, I will be fully, actively involved.

So, thank you very much for coming. And a special thanks to members of the Cabinet and the Congress. Thank you all very, very much.

Note: The President spoke at 1:22 p.m. in Room 450 at the Old Executive Office Building. In his opening remarks, he referred to Secretary of Energy James Watkins; Linda Stuntz, Deputy Under Secretary of Energy and Director of the Office of Planning Policy and Development; Sheila Watkins, Secretary Watkins' wife; Secretary of Agriculture Clayton K. Yeutter; Secretary of Transportation Samuel K. Skinner; Secretary of the Interior Manuel Lujan, Jr.; Michael J. Boskin, Chairman of the Council of Economic Advisors; Michael Deland, Chairman of the Council on Environmental Quality; and Hank Habicht, Deputy Administrator of the Environmental Protection Agency.

Letter to Congressional Leaders Reporting on Soviet-United States Arms Control Agreements

February 20, 1991

Dear Mr. Speaker: (Dear Mr. Chairman:)

In accordance with section 38 of the Arms Control and Disarmament Act as amended by section 3(b) of the Arms Control and Disarmament Amendments Act of 1987 (22 U.S.C. 2578), attached is a classified report prepared by the United States Commissioner to the U.S.-U.S.S.R. Standing Consultative Commission (SCC) concerning the activities of the SCC during calendar year 1990. The report includes detailed information on all substantive issues raised by either party to the Treaty on the Limitation of Anti-Ballistic Missile Systems and the responses of the other party to those issues.

Sincerely,

George Bush

Note: Identical letters were sent to Thomas S. Foley, Speaker of the House, and Claiborne Pell, Chairman of the Senate Foreign Relations Committee. An original was not available for verification of the content of this letter.

Nomination of Michael T.F. Pistor To Be United States Ambassador to Malawi

February 20, 1991

The President today announced his intention to nominate Michael T.F. Pistor, of Arizona, to be Ambassador Extraordinary and

White House NES Event
Wednesday, July 23, 1991

President's Talking Points

- Good Afternoon and Welcome
- In February of this year I sent to Congress a National Energy Strategy.
- Most of the initiatives contained in the Strategy can be implemented under existing authority. Admiral Watkins will brief you on the progress we have made so far.
- But I want to take special note of one such initiative in particular.
- I am announcing today the elevation of the Solar Energy Research Institute to the status of National Laboratory.
- SERI will be known as the National Renewable Energy Laboratory, and thus joins an elite group of our Nation's finest scientific centers.
- This elevation is more than symbolic. It represents my Administration's commitment to the search for better, less polluting energy technology.
- Let me turn now to NES initiatives that require legislation.
- Under the leadership of Senators Johnston and Wallop, the Senate Energy Committee has completed work on a comprehensive bill, S-1220, that fulfills most of the legislative requirements I have sought in the NES.
- The House began mark-up of energy legislation on July 17.
- Congress and the Executive branch are presented with a splendid opportunity to provide the American people a coherent plan of action on energy.
- But let me say that the energy sector is complex.
- Quick fixes will not produce good energy policy.
- What is needed is a comprehensive bill that addresses fundamental reform and encourages efficiency and innovation.

- Action is needed on all fronts:
  - industrial, commercial and private consumers need appropriate incentives to use energy more efficiently.
  - we need to remain world leaders in technology.
  - we have to fully utilize our domestic resources.
  - and we must enhance environmental quality.
- Our critics do not see energy policy in its full dimensions. They have focused on one or two issues that represent especially difficult decisions. ANWR is one of them.
- In 1980 Congress specifically avoided the designation of a portion of the Arctic National Wildlife Refuge (ANWR) coastal plain in Alaska as wilderness.
- Congress asked the Interior Department to determine whether the resources of ANWR could be developed without harm to the environment.
- Since then over 170 studies have been conducted by Interior.
- These studies reached the conclusion that, under strict environmental oversight, ANWR's coastal plain could be accessed and its resources developed.
- The wildlife of ANWR can and will be protected. The Director of Fish and Wildlife, who is here today, believes, on the basis of the rigorous studies he has conducted, that this protection can be assured.
- ANWR's neighbors, some of whom are also here today, believe their way of life can also be protected if we proceed to tap the vital resources of ANWR, and
- The State of Alaska believes that ANWR's development is desirable.
- Against these assessments, our critics have been unable to put forth a single credible study to support their position.
- Our critics have also argued that the answer to our energy and environmental problems lies in building smaller, fuel efficient cars.
- To that I say that the answer to <u>one</u> part of our energy and environmental problems lies in building cars, trucks and buses that operate efficiently on cleaner gasoline, on compressed natural gas, on alcohol, on propane, on

electricity, and on any other fuel and engine that our engineers and inventors can be motivated to bring to market.

- I urge the Congress not to be distracted by the critics.

- I will attach my Administration's seal of approval only to energy legislation that satisfies our many urgent requirements.

- We need - this country requires - a comprehensive energy bill that addresses efficiency, renewable energy, natural gas and nuclear regulatory reform, access to ANWR, greater competition in the electric utility sector, and alternative fuels and technology for transportation.

- I hope all of you here today will work with me and my Cabinet to reach these objectives.

Grant/Blymire
A:ENERGY
July 19, 1991
Draft three

Secretary Watkins
Sen. Wallop
Sen. Johnston

BRIEF REMARKS: NATIONAL ENERGY STRATEGY BRIEFING
ROOM 450
WEDNESDAY, JULY 24, 1991
2:45 P.M.

[Acknowledgements]. OPL OCA

Five months ago -- I believe most of you were here with us that day -- our Administration announced a comprehensive and balanced strategy for an energy future that is secure, efficient and environmentally sound. Our National Energy Strategy is designed to meet needs this Nation can't afford to compromise: continued economic growth, increased energy efficiency, strong environmental protection, and reduced dependence on foreign oil.

This strategy relies on the magic of the marketplace, the resourcefulness of the American people, and the responsible leadership of industry and government. **And as we enter the Next American Century, this balanced approach will propel a larger and larger American economy, -- while using less and less energy.**

~~The radical measures~~ some have ~~urged~~ pushed for radical measures in order to reduce our oil imports ~~would~~ measures that would hurt American industries, jobs and consumers. So we must act with care, ~~but we must~~ and yet act comprehensively. **The NES strikes a balance -- a sound and reasonable middle ground that will achieve greater energy security without stopping the economy cold.**

We start by using energy more **efficiently.** We ~~'ve got~~ need to invest in accelerated research -- to keep America on the cutting edge of **new energy technologies** like ~~biomass and~~ alternative

~~fuel~~ type of alt. fuel

fuels, electric cars, high-speed rail, solar and geothermal power, [and safe and secure nuclear technology.] → might want to cut this, per Vito.

~~Back in my younger days, I made my living looking for new energy sources, running a little oil company in Texas called Zapata. Today,~~ we want to build an energy future that opens the door to even more **new and diverse energy sources** -- because America's energy future should never be at the mercy of foreign [sources.] new word exporters?

→ more renewable sources --

We want to increase use of power from renewable sources - solar, hydro

SHE? POTUS?

As Secretary Watkins [and other briefers] will tell you, most of the initiatives contained in the Strategy can be implemented under existing authority -- and the Admiral and his staff have made quite a bit of progress. We can set in motion a substantial part of our Strategy **right now**, without waiting for legislation.

TPS

Stagliano Vito 586 6660

One initiative in particular is very important to me. Today I am announcing the elevation of S.E.R.I. -- the Solar Energy Research Institute -- to the status of National Laboratory. S.E.R.I. will be known as the **National Renewable Energy Laboratory**, and ~~it now~~ will join (~~selects?~~) an elite group of our Nation's finest scientific centers. This action today is more than symbolic -- **it represents this Administration's commitment to the search for better, cleaner energy technology.**

TPS

SHE

We've made some headway since we released the Strategy back in February. Under the leadership of Senators Johnston and Wallop, the Senate Energy Committee ~~endorsed~~ passed a comprehensive and

KJ

balanced energy bill, one which embodies the key elements of our Strategy. **I urge the full Senate to act swiftly on this bill.**

Conservationists and industry alike should be able to fully support the National Energy Strategy. ~~I know in some cases there's been a misunderstanding about the actual contents of the legislation, but we've seen one thing:~~ **the more people know about the ~~National Energy Strategy~~ legislation, the more they like it.**

Let me tell you what the Johnston-Wallop bill actually does: on balance, it defines a very positive role in energy for the Federal government. It **enhances energy efficiency** -- in areas like building efficiency standards, Federal energy management efforts, energy conservation investments by utilities, and the development of new technologies and alternative fuels.

On the supply side, it ensures access to the energy we need to sustain **continued growth** -- growth that is environmentally sound. We've made a lot of progress on cleaner gasoline over the last few years. But when Americans pull up to the pump, they deserve to have the choice of a whole range of environmentally sound fuels like ethanol, methanol, electricity, propane, and natural gas.

~~We're expecting~~ that the Johnston-Wallop bill will reach the Senate floor in September. The House began mark-up on the bill last week, and **we're hoping for the same comprehensive approach in the House as in the Senate.**

We need Congress to act wisely -- and act soon. We need action on all fronts: to remain world leaders in technology; to

protect the environment; to make the most of our domestic resources; and to encourage energy efficiency through incentives for industrial, commercial and private consumers.

Sadly, though, our critics can't see the big picture. They have focused on one or two issues that admittedly are controversial. ANWR is one of them.

Let me give you a little history. In 1980, Congress specifically **avoided** designating part of the coastal plain in Alaska, the Arctic National Wildlife Refuge, as "wilderness." Instead, Congress asked the Interior Department to determine whether the resources of ANWR could be developed without harming the environment.

Since then, Interior has conducted more than 170 studies. Time after time, these studies have shown -- that under strict environmental oversight -- ~~that~~ ANWR's coastal plain and its resources could be developed safely. **The wildlife will be protected** -- the Director of Fish and Wildlife is here today -- and he has conducted rigorous studies. **The way of life will be protected** -- some of ANWR's neighbors are here today. And finally, the State of Alaska fully supports ANWR's development.

What about the critics? In the face of all this evidence -- 170 studies and the considered opinion of Alaska's own government -- the critics haven't put forth a single study. And still, they won't budge. **I urge Congress to look at these facts -- and not be distracted by the critics.**

You're here today because you can make a difference in the energy future of this country. Some people act as if **Washington** can snap its fingers and impose an energy strategy on the rest of the country. We know that just won't work. The best part of our Strategy is that it draws upon America's **greatest national resource -- the ingenuity of our people.** ~~With their resourcefulness, we can ensure that **America in the next century will be energy efficient, environmentally sound, and economically strong.**~~

we already did this in 91' one.

To each of you, I say keep up the good work. Your support has been tremendous in this effort, and I hope I can continue to count on you. God bless the United States of America.

# # #

DRAFT

7/17
MK -
let's chat
about this
in the AM
- KT

White House NES Event
Wednesday July 23, 1991

Admiral Watkins' Talking Points

- Thank you Mr. President
- As you know, the development of the National Energy Strategy has been one of this Administration's top priorities.
- The last two years have seen the completion of major domestic initiatives that include not only the NES, but the Clean Air Act Amendments and a National strategy for transportation.
- These critical policy initiatives are inter-related. They impact heavily on the economy, on the environment, on consumers, and on the Federal budget.
- The NES, as the President said, is a comprehensive strategy.
- Its successful implementation requires action by a number of Executive Branch agencies, and by Congress.
- The NES legislative agenda comprises about 25% of the policy initiatives contained in the NES. This legislation is critical and cannot be constructed in a piecemeal fashion.
- The Senate Energy Committee has acted. Its distinguished Chairman, Senator Johnston, Minority leader, Sen. Wallop, and members have completed work on S-1220, a comprehensive bill that to a large extent reflects the objectives of this Administration.
- In the House, Chairman Sharp began mark-up of energy legislation on July 17.
- We are eager to work closely with the House, as we have in the Senate, to assure passage of a Bill that the President can support.
- We believe that the few issues receiving the most intensive press coverage -unfortunately, I might add, given the wide range of issues we are addressing - can be resolved if reason rather than emotion governs our debate.

- We will cede no quarter to our critics on our commitment to environmental quality. The President's leadership on clean air and on Outer Continental Shelf protection are indisputable evidence of this commitment.

- Similarly on energy, we believe that important - indeed profound steps - have been taken to redirect energy policy and Federal expenditures.

- The renewable energy budget of the Department of Energy has risen by 45% in the last two years.

- We have planned a $1 billion investment in renewable energy technology in the next four years.

- You heard the President announce the elevation of the Solar Energy Research Institute to the status of a full-fledged National Laboratory.

- The National Renewable Energy Laboratory will have increased resources and a broader mandate to assure that environmentally superior technology reaches the market sooner rather than later.

- This laboratory, which will have a new Headquarters Building, will join the ranks of the Nation's premier centers of research and development.

- Increased financial support and enhancement of SERI's status are important steps in this Administration's commitment to the search for environmentally superior energy technology.

- We have moved ahead rapidly as well on implementation of other NES initiatives that do not require legislation. I would note especially:

  - The Executive Order issued by the President in April directing Federal agencies to reduce energy consumption by 20 percent, purchase less polluting vehicles, and work with the utility industry to expand the use of renewable technology.

  - The Internal Revenue Service rulings of May and June on tax free treatment of utility investments in conservation, and on non-taxable employer-provided public transit benefits

  - The creation of a government-industry consortium on on the development of batteries that will make electric vehicles a viable means of transportation.

- The DOE final rule on fluorescent light ballasts test procedures
- The proposed rule on WEPCO
- The FERC regulations on expansion of hydroelectric capacity at existing dams, and the FERC Conference on transmission and competition in the electric power market
- and many others.

- We have also moved aggressively to counteract the campaign of misinformation against certain portions of the NES and Senate Energy Committee bill.
- The debate on ANWR has been especially distorted.
- We believe that this Administration has fairly and comprehensively assessed the environmental impacts of ANWR development.
- Of critical importance is the conclusion reached by the U.S. Fish and Wildlife Service that development can take place on a small portion of ANWR's coastal plain under strict environmental protection.
- Alaska's North Slope production is in decline. It will become economically unsustainable by the end of the next decade.
- ANWR's critical resources will revitalize Alaska's production system and...
- along with the advanced oil recovery initiatives we are pursuing in the lower-48...
- will assure that this Nation does not have to depend on oil imports for 65% or 70% of its post-2000 needs.
- Energy efficiency objectives are the foundation of the NES. But we view efficiency as something more than pet conservation projects.
- We believe that true energy efficiency is achieved with superior American technology.
- And we believe that investments in innovation, creativity, science and technology are preferable to investments in government controls and mandates.

- We urge the Senate and the House to address energy policy in all of its dimensions. We urge that the hard decisions be made along with the easy ones.

- The President and the country deserve a comprehensive energy bill that is dedicated to environmental quality, economic well being, energy security, and fiscal prudence.

- I urge you all here today to join us in this critical, essential, undertaking.

Department of Energy
Washington, DC 20585

Facsimile Cover Sheet
for
The Office of Policy, Planning and Analysis

91 JUL 16 A8:41

Date: 7/16

To: MARY KATE GRANT

Organization: _____

Phone/Fax Number: 456-6218

From: SUSAN COBB

Subject/Comments:

ATTACHED ARE THE REVISED TALKING POINTS FOR LINDA STUNTZ. PETER SABA THOUGHT YOU MIGHT FIND THEM helpful

This fax contains 5 pages, including this cover. If you did not receive all of the pages or if illegible, please phone

_____ at (202) 586-5316.

TALKING POINTS
FOR THE
SECRETARY OF ENERGY ADVISORY BOARD (SEAB)
JULY 16, 1991

Welcome!

- I join Admiral Watkins in greeting all of you here today. Thank you for coming, this is a timely and important meeting.

- We welcome this opportunity to update you on our progress on the National Energy Strategy since its release in February.

- Today, I will address NES legislative developments. I also want to update you on administrative implementation of the NES. Although much of the public views the NES, and NES legislation, as one and the same, a substantial part of the NES entails actions that can be done administratively without legislation.

The Senate Energy Bill

- S. 1220 (formerly S. 341), was reported on May 23, 1991 by a vote of 17-3.

- Under the leadership of Senators Johnston and Wallop, the Committee produced a comprehensive and balanced energy bill, largely congruent with the NES.

- Conservationists and producers alike should be able to support S. 1220 if they'll only look at what is actually in it. But as the Union of Concerned Scientists and Sierra Club letters I have distributed indicate, our challenge is to educate people on the substance of the bill.

S. 1220 actually does a lot to enhance energy efficiency.

- The bill would for example:

  - Increase support for the development and implementation of efficiency standards for new buildings.

  - Strengthen energy management efforts by Federal agencies.

  - Encourage States and utilities to consider investments in energy conservation as an alternative to new powerplants.

  - And encourage the development and early introduction of transportation technologies capable of using alternative fuels, such as electricity and alcohol from biomass.

On the supply side, S. 1220 would:

- Foster environmentally responsible development of all domestic energy resources, including leasing and production from the Arctic National Wildlife Refuge (ANWR). Exploration and development in ANWR can and must be conducted in an environmentally sound manner.

- S. 1220 would also reform the licensing procedures for new nuclear powerplants to ensure full review of all safety and other issues before construction begins.

- And the bill would enhance the use of renewable energy sources, coal and natural gas by statutory and regulatory reforms.

Next Steps

- S. 1220 may reach the floor in September but it might be later, depending on the pressure that is put on the leadership.

- The Administration does not favor every provision of S. 1220, but we believe the bill, on balance, defines a very constructive role in energy for the Federal government.

- S. 1220 minimizes the types of regulatory interventions and Federal subsidies proven to be counter productive in the past and goes a long way in improving our energy future, striking the right balance among energy, the economy, and the environment.

- If the Senate acts on CAFE outside the context of a comprehensive bill, (e.g., the Bryan bill) chances for consideration of anything else are diminished greatly. The keys to the success of S. 1220 are CAFE and ANWR. ANWR certainly will not pass without being part of a balanced bill.

On the House side

- Mark up begins tomorrow in the Energy and Power Subcommittee of the House Energy and Commerce Committee.

- Addressing one title per week, Chairman Sharp wants to deal with the "less controversial" provisions before the August recess:

  - Energy efficiency,
  - Natural gas,
  - Octane cheating,
  - SPR, and
  - Coal.

- Issues to be considered after Labor Day include:

  - CAFE,
  - ANWR,
  - Nuclear licensing reform,
  - nuclear waste, and
  - PUHCA reform.

- Expect this bill to be less balanced, more market intervention, particularly in conservation. However, we believe there is growing interest in the House in producing a comprehensive bill.

<u>In the meantime, we are aggressively implementing the administrative (or non-legislative) portion of the NES.</u>

- Major initiatives since the NES was completed include:

  - The President issued an Executive Order on Federal energy management. (April 17, 1991)

  - DOE issued a final rule on test procedures for florescent light ballasts. (April 24, 1991)

  - DOE also issued a final rule on efficiency standards for cleaning products. (May 14, 1991)

  - FERC issued new regulations to improve licensing procedures for expanding capacity at existing hydropower sites. (May 8, 1991)

  - FERC will take up tomorrow a "Mega-NOPR" on natural gas pipeline regulation issues.

  - FERC also held a public conference on electricity issues. (June 18, 1991) DOE submitted written comments stressing the need to take a more generic approach and work more closely with states on issues ranging from IRP to transmission to mergers. We also urged FERC to play a greater role in CAAA.

  - IRS issued a proposed rule to increase the non-taxable limit on employer-provided benefits for the use of public transportation, for the first time since 1984 to a level Treasury believes is the maximum amount allowable under current law. (May 20, 1991)

  - IRS issued a proposed rule clarifying that treatment of efficiency investment incentives given by utilities in the form of rate discounts or nonrefundable credits are not taxable income to the recipient. (June 11, 1991)

- Western Area Power Administration has published a notice of a proposed energy management program to foster integrated resource planning. A public hearing process is expected to start in the near future.

- A proposed rule addressing the WEPCO issue was announced by EPA. (June 6, 1991)

- Five interagency task force efforts are underway to resolve certain NES issues affecting a broad range of federal and state interests.

  - Alaska North Slope
  - Energy and Environmental Regulation
  - Radionuclide Regulation
  - Energy Efficient Housing
  - Energy Facility Siting

- Three more interagency task forces are also planned.

  - Licensing of Energy Projects
  - Market-Mechanisms for Environmental Compliance
  - Waste Minimization

In conclusion, let me make some observations.

- ANWR and CAFE have been the lightening rods for the entire energy debate. Without higher mandatory CAFE standards, we do nothing on conservation. With ANWR, it is said that our policy is pro-production, anti-environment. These simplistic assertions are not conducive to a healthy energy debate, but that is politics for you.

- We do believe the NES is holding up very well. The more people learn about it, the more they come to appreciate it and the complexity of the challenge that it tackles.

- We appreciate very much your contributions to the quality of the NES and to its durability.

- Now, we'd like to hear your thoughts on the NES and its key elements.

- In addition, we would welcome any ideas you think should be pursued which would help us achieve the comprehensive objectives of the National Energy Strategy.

Note: The proclamation was released by the Office of the Press Secretary on February 15.

Statement by Press Secretary Fitzwater on the Offer by Iraq to Withdraw From Kuwait

February 15, 1991

We have not yet examined a full official text of the Revolutionary Command Council's statement, but it clearly contains conditions for Iraqi withdrawal from Kuwait. The United Nations Security Council resolutions are clear in their insistence that the withdrawal be complete and unconditional. Promises alone are not sufficient. There must be not only agreement to comply with all United Nations Security Council resolutions but also immediate and concrete action on the ground.

Note: Mr. Fitzwater read the statement to reporters at 8:32 a.m. in the Briefing Room at the White House.

Letter to Congressional Leaders Transmitting the Report on Soviet Noncompliance With Arms Control Agreements

February 15, 1991

Dear Mr. Speaker: (Dear Mr. President:)

Enclosed are classified and unclassified copies of the Annual Report on Soviet Noncompliance with Arms Control Agreements. This report also subsumes a special report requested on the status of SS–23s in Eastern Europe and on the Krasnoyarsk radar.

This year, while concerns about Soviet compliance with arms control agreements remain, I can report that the U.S. demand for strict adherence to arms control agreements has yielded positive results in some areas. Nonetheless, a number of compliance issues remain outstanding and several new compliance issues have arisen.

The United States will continue to press the Soviet Union to fulfill all its arms control obligations and to take the actions necessary to correct its arms control violations expeditiously. Anything less than full compliance with past treaties cannot help but affect our judgment with respect to future treaties.

The report represents the Administration's best judgment at a given point in time. As our understanding of certain compliance issues in the report continues to evolve, we will continue to consult with the Congress and seek Soviet redress of our concerns.

Sincerely,

George Bush

Note: Identical letters were sent to Thomas S. Foley, Speaker of the House of Representatives, and Dan Quayle, President of the Senate.

Remarks to the American Association for the Advancement of Science

February 15, 1991

Thank you very much. Thank you, and please forgive me for keeping you waiting. First, let me pay my respects to Secretary Watkins and to Dr. Bromley and to NASA's very able Administrator, Admiral Truly.

Before talking about the subject at hand, I do want to make a few comments on the statement that came out of Baghdad early this morning. When I first heard that statement, I must say I was happy that Saddam Hussein had seemed to realize that he must now withdraw unconditionally from Kuwait, in keeping with the relevant United Nations resolutions.

Regrettably, the Iraq statement now appears to be a cruel hoax, dashing the hopes of the people in Iraq and, indeed, around the world. It seems that there was an immediate celebratory atmosphere in Baghdad after this statement. And this reflects, I think, the Iraqi people's desire to see the war end, a war the people of Iraq never sought. Not only was the Iraq statement full of unacceptable old conditions but Saddam Hussein has added several new conditions. And we've been in touch with members of the coalition, and they recognize that there

is nothing new here, with the possible exception of recognizing for the first time that Iraq must leave Kuwait.

Let me state once again they must withdraw without condition, there must be full implementation of all the Security Council resolutions, and there will be no linkage to other problems in the area, and the legitimate rulers of Kuwait must be returned to Kuwait. Until a massive withdrawal begins, with those Iraqi troops visibly leaving Kuwait, the coalition forces, acting under United Nations Resolution 678, will continue their efforts to force compliance with all the resolutions of the United Nations.

But there's another way for the bloodshed to stop. And that is for the Iraqi military and the Iraqi people to take matters into their own hands—to force Saddam Hussein, the dictator, to step aside, and to comply with the United Nations resolutions and then rejoin the family of peace-loving nations.

We have no argument with the people of Iraq. Our differences are with Iraq's brutal dictator. And the war, let me just assure you all, is going on schedule. Of course, all of us want to see the war ended soon and with a limited loss of life. And it can if Saddam Hussein would comply unconditionally with these U.N. resolutions and do now what he should have done long, long ago.

So, I'm sorry that after analysis and reading the statements out of Baghdad in their entirety, there is nothing new here. It is a hoax. There are new demands added. And I feel very sorry for the people in Iraq. And I feel sorry for the families in this country who probably felt as I did this morning when they heard the television that maybe we really had a shot for peace today.

But that's not the case. And we will continue. We will pursue our objectives with honor and decency. And we will not fail.

And now let me just move forward to the business at hand. I want to salute in addition to the three with me here, Dr. Atkinson, Dr. Langenberg, Dr. Lederman, Dr. Rowland, and distinguished friends of science gathered here today.

I view it as an honor to be over here with you all today. Since its founding nearly a century and a half ago, this association, your association, has watched over the most far-reaching and most breathtaking transformation that human society has ever known. Science and technology have brought unprecedented prosperity, mobility, health, and security to millions around the world. And today the spirit of innovation is alive and well in America. Of course, times have changed. Some say that if Edison had invented the light bulb today, we'd have scores of studies citing the dangers of electricity. [*Laughter*] And the newspapers would headline the story "Candle Industry Threatened." [*Laughter*]

Well, science and technology have touched all of our lives, from the way we do our jobs to the kind of medical care we receive. And especially in the last few weeks, anyone who has been near a television has seen the dramatic effect, the evidence rather, of how technology is changing the face of war. Modern weapons are making is possible to face down aggression without the degree of widespread destruction and loss of civilian life of wars past.

And that's why I'm going up today to visit with the workers who make the Patriot missile. Our investment in defense research and development over the past decade is now saving the lives of Americans, of our allies, and even of our adversaries. And I am certain that this struggle will end decisively. And again, let us all pray that it ends quickly.

Next week the administration will release its national energy strategy, with new public and private initiatives to increase energy efficiency and conservation, preserve our environment, encourage alternative sources of energy, and reduce our vulnerability to foreign oil supply disruptions.

Now some will say that reducing our energy vulnerability is not enough, that we should take more drastic measures for total energy independence. But then there's reality. We are a long way from achieving total energy independence. We must avoid unwise and extreme measures, such as excessive CAFE [Corporate Average Fuel Economy] standards for automobiles that would seriously hurt America's consumers and America's jobs and American industries. Instead, we must pursue an energy strategy that is reasonable, balanced, and compre-

hensive. And that will keep us on the course toward strong economic growth.

Science and technology will also be a crucial factor for our economic strength. If the past is prolog, our economic future is going to be very, very bright indeed, in spite of today's concerns. Over a third of the economic growth that we've enjoyed since the 1930's, over a third of it, has been the result of new knowledge, including science and technology. And beyond advances in prosperity, in security, work on the frontiers of knowledge is one of humanities greatest adventures.

For all of these reasons, the budget that I sent to Capitol Hill last week included a 13 percent increase for R&D—for research and development—and that increase is one of the largest in the budget. And it's proof of our determination to make the investments needed to ensure this country's continued leadership. We intend to help scientists spend less time searching for funding and more time making breakthroughs.

And one of our highest priorities is basic research, especially by the individual scientist or a small team. To support their work, our budget calls for $1-billion increase—$1 billion in basic research. And funding at the National Science Foundation would go up by 18 percent, which would put the NSF budget back on the track toward the doubling that I've long sought. And increases in basic research at the NIH and again at Jim's Department of Energy, NASA, and the Department of Agriculture will add to the base of knowledge on which the future is being built.

At the same time, this budget makes a strong commitment to the facilities that many individual scientists will need to reach to the future frontiers in their selected fields. And that means nuclear accelerators in physics, telescopes in astronomy, a strong space science program at NASA, and the human genome project in biology—all projects that will have a profound impact on humanity.

Over the next year, the United States will spend over $1 billion on the U.S. Global Change Program. And part of our efforts take the form of a mission to planet Earth, where satellites will monitor the Earth from space. And our mission from planet Earth will extend human curiosity to frontiers beyond our own planet to the Moon, to the planets, and beyond.

But along with record-level Federal investment in R&D totaling $76 billion, we are committed to working with American industry to make it easier for companies to capitalize on the discoveries of basic science and to develop new products and new processes. And that's why I'm again calling on the United States Congress to make the research and experimentation tax credit permanent, to make a long-term commitment to our technological future.

We face a crucial challenge in developing the generic technologies that are important to both the public and the private sectors. And that's why the budget supports work in high performance computing and communications, in energy research and development, in aeronautics, in biotechnology—the basis for some of the most promising industries of the 21st century.

Technology may be the key to the future, but people are the key to technology. The national education goals that we established with the Nation's Governors explicitly recognizes this connection. And one of our most ambitious goals is for American students to be first in the world in science and math achievement by the year 2000.

Our budget includes substantial funding increases for math and science education. But those math and science goals will never be achieved if they are seen simply as goals for government alone. All sectors of society must recognize the importance of scientific literacy and strive to achieve it. And that's where the AAAS comes in. Your Project 2061 is working where all lasting change must occur—at the local level, to transform the teaching of math and science.

Last fall, we had 200 of the best mathematics and science teachers in the country here to the White House. And more than a few of those teachers pointed out that kids are natural-born scientists. And they delight in the sheer pleasure of learning new things, making something work, understanding the world. This delight is something most scientists never lose. The Nobel Prize-winning geneticist Barbara McClintock once said of her work: "I did it because it was fun. I couldn't wait to get up in the morning. I never thought of it as science."

And the sheer adventure of science is one of the main reasons for holding this meeting and for the continued vitality of the AAAS. Sharing science's sense of adventure through education and outreach has never been more important than now. And your work is vitally important. Of all humanity's concerns, the power of knowing is the greatest pursuit, the surest promise for a brighter future, and the greatest covenant that we keep with those kids of the future—those future generations.

So, let us pursue the adventure of science as a sacred trust. And let us keep the fire of the American mind burning brightly for the sake of the future that our children deserve.

Thank you all very, very much for coming here. I hope your meetings are worthwhile and productive. And we're proud of each and every one of you. And at this special time, may God bless the United States.

Note: President Bush spoke at 9:58 a.m. in Room 450 of the Old Executive Office Building. In his remarks, he referred to Secretary of Energy James D. Watkins; D. Allan Bromley, Assistant to the President for Science and Technology; Richard C. Atkinson, chairman of the board, Donald H. Langenberg, president, and Leon M. Lederman, president-elect of the association; and Sherwood Rowland, president of the University of California at Riverside.

Exchange With Reporters in Andover, Massachusetts, on the Offer by Iraq To Withdraw From Kuwait

February 15, 1991

Q. Mr. President, is there any indication that Iraqis are turning around and going home?

Q. Do you think this is words only—this Iraqi statement?

The President. What statement? You mean this morning?

Q. Yes.

The President. Oh, there's no evidence of any withdrawal. I mean, as I said down in Washington, it's a cruel ploy. What he did was reiterate some conditions and add some new ones. And it's totally unacceptable to everybody.

You know, my heart goes out to the people in Iraq that you saw kind of jumping with joy early on, firing their weapons—which is I guess their sign of joy—in the air, and only to recognize when the fine print came out that it was a step backwards.

So, there's no sign of any withdrawal. I wish there were. So did the whole world.

Q. ——members of the coalition, sir?

Q. What do you think the use of the word "withdrawal" means? It's the first time we've heard that.

The President. I don't know. It doesn't mean compliance with the United Nations resolutions. Until that happens, regrettably, there will not be a cessation of hostilities. There will be no pause, there will be no cease-fire, there will be no reliving experiences in the past that were unhelpful to a peaceful, satisfactory conclusion of the war. And so, there's nothing in this thing to offer hope. I wish I thought there was; there's not.

Q. Any sign that this tempts any members of the coalition?

The President. No, they're all—the ones we've talked to are all solid and got on this thing the minute they saw the declaration coming out of Baghdad, pronounced it—it was an initiative—pronounced it dead on arrival because there wasn't anything new or significant. There was just some more conditions, including asking the American taxpayer to pay for damage in Iraq. It's the other way around—there—reparation sanctions are called for under the United Nations. Reparations for Iraq—undoes the damage that it's done to its neighbors. I don't know how you repay for the loss of human life in Kuwait, the brutality, the 15-to-20-year-old Kuwaitis just this last week. You can't make amends for that.

But this was a cruel ploy. And the world saw it as such, including the coalition, which is just as solid today as it's ever been.

Now, I've got to get on and learn something more about the Patriot. But thank you all very much.

Note: The exchange began at 12:40 p.m. in the Andover Room of the assembly building at the Raytheon Missile Systems Plant.

Grant/Blymire
A:ENERGY
July 17, 1991

BRIEF REMARKS: NATIONAL ENERGY STRATEGY BRIEFING
ROOM 450
WEDNESDAY, JULY 24, 1991
TIME?

[Acknowledgements].

Five months ago -- I believe most of you were here with us that day -- our Administration announced a comprehensive and balanced strategy for an energy future that is secure, efficient and environmentally sound. Our National Energy Strategy is designed to meet needs this Nation can't afford to compromise: continued economic growth, increased energy efficiency, strong environmental protection, and reduced reliance on foreign oil.

We know that the radical measures some have urged in order to reduce our oil imports would hurt American industries, jobs and consumers. So we must act with care, but we must act comprehensively. **The NES strikes a balance -- a sound and reasonable middle ground that will achieve greater energy security without stopping the economy cold.**

The power behind this strategy is strong -- for it relies on the magic of the marketplace, the resourcefulness of the American people, and the responsible leadership of industry and government. **And as we enter the Next American Century, this balanced approach will power a larger and larger American economy -- while using less and less energy.**

The way to do it is to use energy more **efficiently.** We've got to invest in accelerated research -- to keep America on the

cutting edge of **new energy technologies** like biomass and alternative fuels, electric cars, high-speed rail, solar and geothermal power, and safe and secure nuclear technology.

Back in my younger days, I made my living looking for new energy sources, running a little oil company in Texas called Zapata. Today, we want to build an energy future that opens the door to even more **new and diverse energy sources** -- because **never again** should America's energy future be at the mercy of events in a single foreign country.

As [Secretary Watkins and other briefers] have told/will tell you, we've made quite a bit of progress since we first released the Strategy back in February. Under the leadership of Senators Johnston and Wallop, the Senate Committee on Energy and Natural Resources endorsed a comprehensive and balanced energy bill, one which embodies the key elements of our Strategy. **I urge the full Senate to act swiftly on this bill.**

Conservationists and industry alike should be able to fully support the National Energy Strategy. I know in some cases there's been a misunderstanding about the actual contents of the legislation, but we've seen one thing: **the more people know about the National Energy Strategy legislation, the more they like it.**

Let me tell you what the Johnston-Wallop bill actually does: it **enhances energy efficiency** -- in areas like building efficiency standards, Federal energy management efforts, energy conservation investments by utilities, and the development of new technologies and alternative fuels. On the supply side, we are

committed to **continued growth** -- growth that is environmentally sound. We've made a lot of progress on cleaner gasoline over the last few years. But when Americans pull up to the pump, they desrve to have the choice of a range of environmentally sound fuels like ethanol, methanol, electricity, propane, and natural gas.

We're expecting that the Johnston-Wallop bill will reach the Senate floor in September. We believe the bill, on balance, defines a very positive role in energy for the Federal government. **We're hoping for the same comprehensive approach when the House considers its own legislation.**

examples like

What does the bill stop?

We need Congress to act wisely -- and act soon. But we can also set in motion a substantial part of our Strategy **right now**, without waiting for legislation. In April, I signed an Executive Order on Federal energy management. Since then, Admiral Watkins has begun implementing the Strategy, and has issued rules concerning florescent lighting and cleaning products. The Federal Energy Regulatory Commission has issued regulations concerning hydropower sites, natural gas pipelines, and electricity issues; and the IRS has cut red-tape for investors in utilities and users of public transportation.

Enacting the National Energy Strategy will not be easy. But our needs for abundant energy, a strong economy and a sound environment demand that we act. **This strategy strikes a delicate balance between the three, and I believe it is the best plan possible.**

→asst. Susan Conrad

Call Henson Moore
Linda Stuntz

You're here today because you can make a difference in the energy future of this country. Some people act as if **Washington** can snap its fingers and impose an energy strategy on the rest of the country. We know that just won't work. The best part of our Strategy is that it draws upon America's **greatest national resource -- the ingenuity of our people.** With their resourcefulness, we can ensure that **America in the next century will be energy efficient, environmentally sound, and economically strong.**

To each of you, I say keep up the good work. Your support has been tremendous in this effort, and I hope I can continue to count on you. God bless the United States of America.

# # #

Mary Kate, here's the stuff from the guy at Energy I told you about(Vito Stagliano, Associate Deputy Undersecretary for Policy Analysis). He said that the NES should not be looked upon as a strategy that stops things, but a strategy that reverses the way we do the things we do. Doo-doo-doo-doo-doooooooo.

NES will maintain all greenhouse gas emission levels at 1989 levels after the year 2000. The Europeans keep trying to get us to list "targets", which is something we cannot safely do. I guess the underlying factor is that we will keep it from worsening, but that's about as good as it gets. P.S. The Canadians also have a snit about this issue, so maybe we shouldn't even bring it up.

NES is not so much **stopping**, as it is **reversing**.

-- It will reverse the deterioration of U.S. oil production.
-- It will reverse the trend of heavy dependence on foreign oil.

NES will increase the use of domestic natural gas.

NES expands energy technology: oil and gas industries are moving ahead to introduce cleaner-burning gasoline and alternative-fuel vehicles.

California, Texas, Colorado, New York, and many other states already have active programs to reduce oil consumption by switching to alternative fuels.

United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240 91 JUL 23 A9:59

FAX COVER SHEET

PLEASE DELIVER TO:

NAME: Carol Blymire

ORGANIZATION: White House

PHONE: 456-7750

FAX NUMBER: 456-6218

PAGES TO FOLLOW: 34

FROM:

NAME: Jim Hughes

Office of the Secretary
Congressional & Legislative Affairs
U.S. Department of the Interior
1849 C Street, N.W.
Washington, D. C. 20240
Ph: (202) 208-7693
Fax: (202) 208-5533

DATE: 7/23/91

MESSAGE:

NUMBER OF STUDIES CONDUCTED OR EXAMINED BY THE FISH AND WILDLIFE SERVICE PRIOR TO FINALIZATION OF THE 1002 REPORT

CARIBOU	POLAR BEAR	MUSKOXEN	BIRDS	OTHER[1]
74	27	17	64	203

*** *** *** *** ***

ANWR STUDIES CONDUCTED OR FUNDED BY THE FISH AND WILDLIFE SERVICE SINCE FINALIZATION OF THE 1002 REPORT

CARIBOU	POLAR BEAR	MUSKOXEN	BIRDS	OTHER
25	3[2]	8	9	11

*** *** *** *** ***

TOTAL

CARIBOU	POLAR BEAR	MUSKOXEN	BIRDS	OTHER[1]
99	30	25	73	214

[1] - "Other" includes (but not limited to) soil, permafrost, hydrology, wolves, grizzly bears, fox, whales, vegetation, effects of fuel spills, air quality, fisheries, oilfield contaminants and climate change. See 1002 Report, "References Cited", pages 47-53 and 170-176, and ANWR Baseline Study, Final Report, pages 3-17.

[2] - due to differences in management of studies, many components of polar bear research are combined into a single study, while the same components of research are treated separately with respect to other species (e.g. caribou). Once the overall study program is conpleted, published reports will be issued for each research topic (such as water resources).

UNITED STATES FISH AND WILDLIFE SERVICE
Office of Legislative Services

7/15/91

TO: File

FROM: Randy Bowman RB

SUBJECT: Count of "Studies" re 1002 Area

I set the following standards for counting studies from the 1002 Report and the Baseline Report:

1. Catagories: Caribou (C), Polar Bears (PB), Muskoxen (M), Birds (B), and Other (O).

2. Counted all studies from Baseline Report in each catagory - pages 3-17 list these.

3. Examined references at end of "Existing Environment" chapter of 1002 Report, and deleted: a) those that duplicated Baseline Report citations; b) that were clearly not scientific in nature, or "studies", such as ASRC Annual Report, and various EISs (on the grounds that these are not studies, but reports based on studies); c) in cases where more than one study was reported as in a publication, and the publication was also cited, I deleted the publication, since the Committee staff requested a count of studies, not publications; and d) studies and reports that seemed to deal solely with human socio-economic matters, since these are not 1002 Area environmental issues.

4. Marked all remaining citations as C, PB, M, B or O, and counted each catagory.

5. Examined references at end of "Environmental consequences" chapter of the 1002 Report, and deleted as per #3, plus any that were cited in the "Existing Environment" chapter.

6. Marked and counted these as per #4. (Copies of both sets of citations, as marked, are in ANWR/FWS reports paper files.)

7. Faxed count and copies to Region 7 1002 Office (Ann Rappaport) to ensure their concurrence with method & numbers.

8. Received return fax with numbers of studies since 1002 Report & qualifing statement re polar bear studies.*

9. Faxed final document to 1002 Office for approval.

* - number cited in summary sheet is higher since it includes on-going, un-published studies

Baseline Report

Table 1. Studies conducted on the Arctic National Wildlife Refuge coastal plain study area, 1982-1985.

Resource	Year	Project title	Investigators	Affiliation	Reports
Soils and Vegetation	1982	Landsat-assisted environmental mapping in the Arctic National Wildlife Refuge, Alaska	D. Walker W. Acevedo K. Everett L. Gaydos J. Brown P. Webber	Univ. Colorado Technicolor Gov. Serv. NASA/Ames Res. Cent. Ohio State Univ. USGS NASA/Ames Res. Cent. U.S. Army Corp of Eng. (CRREL) Univ. Colorado	CRREL Report 82-37 on file, ANWR, Fairbanks
		Vascular plants at Sadlerochit springs	D. Murray	Univ. Alaska, Fairbanks	Status unknown
	1983	1:63,360 scale geobotanical mapping studies in the Arctic National Wildlife Refuge	D. Walker P. Webber K. Everett	Univ. Colorado Univ. Colorado Ohio State Univ.	Geobotanical map on file, ANWR, Fairbanks
		Cooperative land cover/terrain mapping of the Arctic National Wildlife Refuge	C. Marcon S. Talbot M. Shasby L. Strong L. Pank	USFWS, Anchorage USFWS, Anchorage USGS, Anchorage USGS, Anchorage USFWS, Research, Fairbanks	Work in progress
		Soil evolution and biogeochemical dynamics in arctic Alaska	F. Ugolini	Univ. Washington	Status unknown
		Studies on balsam poplar	M. Edwards P. Dunwiddie	Univ. Washington Univ. Washington	Status unknown
	1984	Cooperative land cover/terrain mapping of the ANWR	C. Marcon S. Talbot M. Shasby L. Strong L. Pank	USFWS, Anchorage USFWS, Anchorage USGS, Anchorage USGS, Anchorage USFWS, Research, Fairbanks	Work in progress
		Effects of winter seismic exploration on the coastal plain of the Arctic National Wildlife Refuge, Alaska, 1984	N. Felix T. Jorgenson	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-1 Impacts[c]
		Soil evolution and biogeochemical dynamics in arctic Alaska	F. Ugolini	Univ. Washington	Status unknown
		Mapping vegetation, land-forms and soils for resource inventory and geographic information system	K. Von Schleider	Environmental Systems Research Institute, Redlands, CA	Status unknown
	1985	Effects of winter seismic trails on visual resources, vegetation, and permafrost on the coastal plain of the Arctic National Wildlife Refuge	N. Felix T. Jorgenson M. Raynolds R. Lipkin D. Blank B. Lance	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-21[d]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Airphoto analysis of seismic trails on the coastal plain of the Arctic National Wildlife Refuge	N. Felix T. Jorgenson M. Raynolds R. Lipkin D. Blank B. Lance	USFWS-ANWR, Fairbanks	ANWR Progress Report No. 86-3I[d]
		Snow distribution on the coastal plain of the Arctic National Wildlife Refuge	N. Felix T. Jorgenson M. Raynolds R. Lipkin D. Blank B. Lance	USFWS-ANWR, Fairbanks	ANWR Progress Report No. 86-1I[d]
		Accuracy assessment of Landsat land cover types	L. Pank	USFWS-Research, Fairbanks	Denver Wildlife Research Center Progress Report FY86-1
		Landsat cover map for the Arctic National Wildlife Refuge	Planning	USFWS, Anchorage	Work in progress
		Seasonal toxin production in plants; revegetation of disturbed areas (Okpilak River)	N. Grulke	Univ. Washington	Status unknown
		Soil evolution and biogeochemical dynamics (Okpilak River)	D. Marrett	Univ. Washington	1984 NSF Progress Report on file, ANWR, Fairbanks
Birds	1982				
		Terrestrial bird populations and habitat use on coastal plain tundra of the Arctic National Wildlife Refuge	M. Spindler P. Miller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-5[a]
		Migratory bird use of the coastal lagoon system of the Beaufort Sea coastline within the Arctic National Wildlife Refuge, Alaska, 1981 and 1982	R. Bartels M. Zellhoefer	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-3[a]
		Distribution, abundance, and productivity of whistling swans in the coastal wetlands of the Arctic National Wildlife Refuge, Alaska	R. Bartels M. Zellhoefer P. Miller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-2[a]
		Distribution, abundance, and productivity of fall staging lesser snow geese in coastal habitats of northeast Alaska and northwest Canada, 1980 and 1981	M. Spindler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-1[a]

Table 1. Continued

Resource Year	Project title	Investigators	Affiliation	Reports
	Distribution, abundance, and productivity of fall staging lesser snow geese in coastal habitats of northeast Alaska and northwest Canada, 1982	M. Spindler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-4[a]
1983	Terrestrial bird populations and habitat use on coastal plain tundra of the Arctic National Wildlife Refuge, Alaska	M. Spindler P. Miller C. Moitoret	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-9[b]
	Species accounts of migratory birds at three study areas on the coastal plain of the Arctic National Wildlife Refuge, Alaska, 1983	M. Spindler P. Miller C. Moitoret	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-13[b]
	Migratory bird use of the coastal lagoon system of the Beaufort Sea coastline within the Arctic National Wildlife Refuge, Alaska, 1983	R. Bartels T. Doyle	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-7[b]
	Movement of molting oldsquaw within the Beaufort Sea coastal lagoons of the Arctic National Wildlife Refuge, Alaska, 1983	R. Bartels T. Doyle T. Wilmers	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-6[b]
	Distribution, abundance, and productivity of fall staging lesser snow geese on coastal habitats of northeast Alaska and northwest Canada, 1983	M. Spindler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-2[b]
	Distribution, abundance, and productivity of tundra swans in coastal wetlands of the Arctic National Wildlife Refuge, Alaska, 1983	R. Bartels T. Doyle	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-8[b]
1984	Terrestrial bird populations and habitat use on coastal plain tundra of the Arctic National Wildlife Refuge	C. Moitoret P. Miller R. Oates M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-13[c]
	Species accounts of migratory birds at three study areas on the coastal plain of the Arctic National Wildlife Refuge, Alaska, 1984	P. Miller C. Moitoret M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-14[c]

Table 1. Continued.

Resource Year	Project title	Investigators	Affiliation	Reports
	Migratory bird use of coastal lagoon system of the Beaufort Sea coastline within the Arctic National Wildlife Refuge, Alaska, 1984	A. Brackney J. Morton J. Noll	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-11[c]
	Movements of molting oldsquaw within the Beaufort Sea coastal lagoons of the Arctic National Wildlife Refuge, Alaska, 1984	A. Brackney J. Morton J. Noll M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-12[c]
	Distribution, abundance, and productivity of fall staging lesser snow geese on coastal habitats of northeast Alaska and northwest Canada, 1984	R. Oates A. Brackney M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-7[c]
	Ecology of lesser snow geese staging on the coastal plain of the Arctic National Wildlife Refuge, Alaska, fall 1984.	A. Brackney M. Masteller J. Morton	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-8[c]
	Distribution, abundance, and productivity of tundra swans in the coastal wetlands of the Arctic National Wildlife Refuge, Alaska, 1984	A. Brackney J. Morton J. Noll M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-10[c]
	Distribution and relative abundance of golden eagles in relation to the Porcupine caribou herd during calving and post-calving periods, 1984	F. Mauer	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-3[c]
	Birds and mammals along the Hulahula	R. Gill M. Amaral	USFWS, Anchorage	Trip report on file, ANWR, Fairbanks
1985	Terrestrial bird populations and habitat use on coastal plain tundra of the Arctic National Wildlife Refuge	R. Oates D. Douglas M. McWhorter C. Babcock R. Field S. Gehman T. Maxwell J. Morton	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 86-17[d]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Species accounts of migratory birds at eight study areas on the coastal plain of the Arctic National Wildlife Refuge, Alaska	R. Oates M. McWhorter D. Douglas C. Babcock R. Field S. Oshman T. Maxwell J. Morton	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 86-18[d]
		Migratory bird use of the coastal lagoons system of the Beaufort Sea coastline within the Arctic National Wildlife Refuge, Alaska, 1985	A. Brackney R. Platte J. Morton	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 86-15[d]
		Habitat use and behavior of molting oldsquaw on the coast of Arctic National Wildlife Refuge, Alaska, 1985	A. Brackney R. Platte	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 86-17[d]
		Distribution, abundance and productivity of fall staging lesser snow geese on coastal habitats of northeast Alaska and northwest Canada.	R. Oates A. Brackney M. McWhorter R. Platte J. Morton G. Muehlenhardt C. Bitler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-10[d]
		Ecology of lesser snow geese on coastal plain of the Arctic National Wildlife Refuge, Alaska, fall 1985	A. Brackney R. Platte J. Morton D. Whiting	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 86-11[d]
		Distribution, abundance and productivity of tundra swans in coastal wetlands of the Arctic National Wildlife Refuge, Alaska, 1985	A. Brackney R. Platte	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-13[d]
		Distribution and relative abundance of golden eagles in relation to the Porcupine caribou herd during calving and post-calving periods, 1985	F. Mauer	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-4[d]
Mammals					
Caribou	1982	Evaluation of techniques for assessing neonatal caribou calf mortality in the Porcupine caribou herd	F. Mauer G. Garner L. Martin G. Weiler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 83-6[a]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Fall, winter, and spring distribution of the Porcupine caribou herd, 1981-1982	K. Whitten R. Cameron	Alaska Dept. of Fish and Game (ADF&G), Fairbanks	ADF&G Interim Report, 1982[a]
		Size and composition of the Porcupine caribou herd, 1982	K. Whitten R. Cameron	ADF&G, Fairbanks	Work in progress
		Studies of the Central Arctic caribou herd	R. Cameron K. Whitten	ADF&G, Fairbanks	Work in progress
		Surveys of the Central Arctic caribou herd		Renewable Resources Consulting Services Ltd., Anchorage	Status unknown
		Migratory energetics of caribou	L. Duquette	Univ. Alaska, Fairbanks	Work in progress (M.S. Thesis)
	1983	Size and composition of the Porcupine caribou herd, 1982	K. Whitten R. Cameron	ADF&G, Fairbanks	ADF&G Interim Report, 1983[b]
		Calving distribution and initial productivity in the Porcupine caribou herd, 1982	K. Whitten R. Cameron	ADF&G, Fairbanks	ADF&G Interim Report, 1983[b]
		Studies of the Porcupine caribou herd, 1982-1983	K. Whitten	ADF&G, Fairbanks	ADF&G Preliminary Report, 1984[b]
		Calving distribution, initial productivity, and neonatal mortality of the Porcupine caribou herd, 1983	K. Whitten G. Garner F. Mauer	ADF&G, Fairbanks USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-12[b]
		Probe: Spatial and temporal distribution of biting and parasitic insects on the coastal plain and adjoining foothills of the Arctic National Wildlife Refuge, Alaska	L. Pank E. Friedman C. Curby A. Jones	USFWS-Research, Fairbanks	DWRC Progress Report, 1984[b]
		Yearling mortality study of the Porcupine caribou herd		Yukon Dept. of Renewable Resources Whitehorse, Y.T.	Work in progress
		Spring migration and staging of male caribou in the Porcupine caribou herd		Canadian Wildlife Service (CWS), Whitehorse, Y.T.	Work in progress
		Behavioral, foraging, and movement patterns of a cow caribou during spring migration of the Porcupine caribou herd	L. Duquette	Univ. Alaska, Fairbanks	M.S. Thesis

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Development and alteration of movement patterns in the Central Arctic caribou herd	R. Cameron K. Whitten	ADF&G, Fairbanks	ADF&G Interim Report on file, ANWR, Fairbanks
		Surveys of the Central Arctic caribou herd		Renewable Resources Consulting Services Ltd., Anchorage	Status unknown
		Surveys of the Central Arctic caribou herd		Alaska Biological Research, Fairbanks	Status unknown
	1984	Fall and winter movements, distribution, and annual mortality patterns of the Porcupine caribou herd, 1983-1984	K. Whitten F. Mauer G. Garner D. Russell	ADF&G, Fairbanks USFWS-ANWR, Fairbanks USFWS-ANWR, Fairbanks CWS, Whitehorse Y.T.	ANWR Progress Report No. FY85-17[c]
		Calving distribution, initial productivity, and neonatal mortality of the Porcupine caribou herd, 1984	K.Whitten F. Mauer G. Garner	ADF&G, Fairbanks USFWS-ANWR, Fairbanks USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-18[c]
		Probe: Spatial and temporal distribution of biting and parasitic insects on the coastal plain and adjoining foothills of the Arctic National Wildlife Refuge	L. Pank C. Curby B. Nankivell C. Simon R. Wright	USFWS-Research, Fairbanks	DWRC Progress Report[c]
		Yearling mortality of the Porcupine caribou herd	D. Russell	Yukon Dept. of Renewable Resources, Whitehorse, Y.T.	Work in progress
		Spring migration and staging of male caribou in the Porcupine caribou herd	A. Martel D. Russell	CWS, Whitehorse, Y.T.	Work in progress
		Occurrence of Central Arctic herd caribou in the Arctic National Wildlife Refuge during the spring and summer	R.Cameron K. Whitten	ADF&G, Fairbanks	ADF&G Preliminary Report, 1985[c]
	1985	Fall and winter movements, distribution, and annual mortality patterns of the Porcupine caribou herd, 1985	K. Whitten F. Mauer G. Garner	ADF&G, Fairbanks USFWS-ANWR, Fairbanks USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-21[d]
		Movements of the Porcupine caribou herd prior to, during, and after calving	F. Mauer K. Whitten G. Garner	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-6[d]
		Mortality of neonatal caribou calves in the Porcupine herd	F. Mauer G. Garner K. Whitten	USFWS-ANWR, Fairbanks USFWS-ANWR, Fairbanks ADF&G, Fairbanks	ANWR Progress Report No. FY86-22[d]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Porcupine caribou herd population census	K. Whitten et al.	ADF&G, Fairbanks	ADF&G Report
		Distribution of biting and parasitic insects which may affect Porcupine caribou	L. Pank	USFWS-Research, Fairbanks	DWRC Progress Report No. FY86-2[d]
		Assessment of impacts on Porcupine caribou herd	L. Pank	USFWS-Research, Fairbanks	DWRC Progress Report No. FY86-3[d]
		Movements of satellite collared caribou in the Porcupine and Central Arctic herd	L. Pank W. Regelin	USFWS-Research, Fairbanks ADF&G, Fairbanks	DWRC Progress Report No. FY86-4[d]
		Movement patterns in in the Central Arctic caribou herd in the Arctic National Wildlife Refuge in spring and summer	R. Cameron	ADF&G, Fairbanks	ADF&G Report on file ANWR, Fairbanks
Muskox	1982	Population size, productivity, and distribution of muskoxen in the Arctic National Wildlife Refuge, Alaska	P. Reynolds L. Martin G. Weiler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-7[a]
		Comparative habitat use by muskoxen in northern Alaska	C. O'Brian	Univ. Alaska, Fairbanks	Work in progress (M.S. Thesis)
	1983	Population dynamics and distribution of muskoxen in the Arctic National Wildlife Refuge, Alaska	P. Reynolds L. Martin T. Wilmers T. Doyle	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-10[b]
		Comparative habitat use by muskoxen in northern Alaska	C. O'Brian	Univ. Alaska, Fairbanks	Work in progress (M.S. Thesis)
	1984	Population and herd dynamics, distribution, movements, and habitat use of muskoxen in the Arctic National Wildlife Refuge, Alaska, 1982-1984	P. Reynolds L. Martin G. Weiler J. Noll J. Morton	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-1[c]
		Effects of winter seismic exploration activities on muskoxen in the Arctic National Wildlife Refuge, Alaska, January - May 1984	P. Reynolds D. LaPlant	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-2[c]
		Compartive habitat use by muskoxen in northern Alaska	C. O'Brian	Univ. Alaska, Fairbanks	Work in progress (M.S. thesis)

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Ecology of muskoxen on the Arctic National Wildlife Refuge, 1982-1985	P. Reynolds J. Herriges M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-2[d]
		Movements and activity patterns of a satellite collared muskox on the Arctic National Wildlife Refuge, 1984-1985	P. Reynolds	USFWS-ANWR, Fairbanks	ANWR progress Report No. FY86-5[d]
		Effects of aircraft overflights on muskoxen on the Arctic National Wildlife Refuge, 1982-1985	P. Reynolds	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-8[d]
		Effects of winter seismic exploration activities on muskoxen on the Arctic National Wildlife Refuge, 1982-1985	P. Reynolds	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-24[d]
		Comparative habitat use by muskoxen in northern Alaska	C. O'Brian	Univ. Alaska, Fairbanks	Work in progress (M.S. thesis)
Moose	1983	Population size, composition, and distribution of moose along the Canning and Kongakut Rivers within the Arctic National Wildlife Refuge, Alaska, fall, 1983	L. Martin C. Garner	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 84-4[b]
	1984	Population size, composition, and distribution of moose along the Canning and Kongakut Rivers in the Arctic National Wildlife Refuge, Alaska, spring and fall, 1984	L. Martin C. Garner	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 85-6[c]
	1985	Population size, composition, and distribution of moose along the Canning and Kongakut Rivers in the Arctic National Wildlife Refuge, 1985	G. Garner	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY 86-9[d]
Marine Mammals	1982	Polar bear population, movements, and denning	S. Amstrup	USFWS-Research, Anchorage	Work in progress
	1983	Polar bear population, movements, and denning	S. Amstrup	USFWS-Research, Anchorage	Work in progress
		Bowhead tissue sample	T. Albert	North Slope Environment Protection Office, Barrow	Status unknown

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Polar bear population, movements and denning	S. Amstrup	USFWS-Research, Anchorage	Work in progress
		Bowhead whale surveys	B. Morris	National Marine Fisheries Service	Status unknown
	1985	Polar bear population, movements and denning	S. Amstrup	USFWS-Research, Anchorage	Work in progress
Brown Bear	1982	Ecology of brown bears inhabiting the coastal plain and adjacent foothills and mountains of the northeastern portion of the Arctic National Wildlife Refuge	G. Garner L. Martin G. Weiler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY83-6[a]
		Habitat use and activities of grizzly bears in the Arctic National Wildlife Refuge	M. Phillips	Univ. Alaska, Fairbanks	Prelim. report, Dept. of Wildlife and Fisheries (M.S. Thesis)
	1983	Ecology of Brown bears inhabiting the coastal plain and adjacent foothills and mountains of the northeastern portion of the Arctic National Wildlife Refuge	G. Garner H. Reynolds L. Martin T. Wilmers T. Doyle	USFWS-ANWR, Fairbanks ADF&G, Fairbanks USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY84-11[b]
		Habitat use and behavior of grizzly bears in the Arctic National Wildlife Refuge	M. Phillips	Univ. Alaska, Fairbanks	ANWR Progress Report No. FY84-1[b]
	1984	Ecology of brown bears inhabiting the coastal plain and adjacent foothills and mountains of the northern portion of the Arctic National Wildlife Refuge	G. Garner H. Reynolds L. Martin G. Weiler J. Morton J. Noll	USFWS-ANWR, Fairbanks ADF&G, Fairbanks USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-9[c]
		Habitat use and behavior of grizzly bears in the Arctic National Wildlife Refuge	M. Phillips	Univ. Alaska, Fairbanks	Work in progress (M.S. thesis)
	1985	Ecology of brown bears inhabiting the coastal plain and adjacent foothills and mountains of the Arctic National Wildlife Refuge	G. Garner H. Reynolds M. Masteller J. Herrigea G. Weiler	USFWS-ANWR, Fairbanks ADF&G, Fairbanks USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-12[d]
		Brown bear denning in the northeastern portion of the Arctic National Wildlife Refuge	G. Garner M. Masteller	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-16[d]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Brown bear census techniques	H. Reynolds G. Garner D. Reed	ADF&G, Fairbanks USFWS-ANWR, Fairbanks ADF&G, Fairbanks	ANWR Progress Report No. FY86-23[d]
		Habitat use and behavior of grizzly bears in the Arctic National Wildlife Refuge, Alaska	M. Phillips	Univ. Alaska, Fairbanks	Work in progress (M.S. thesis)
Wolf	1983	Prey utilization by wolves and a preliminary assessment of wolf and prey densities in three drainages within the Arctic National Wildlife Refuge, Alaska	H. Haugen	Univ. Alaska, Fairbanks	ANWR Progress Report No. FY84-5[b]
	1984	Wolves of the Arctic National Wildlife Refuge: Their seasonal movements and prey relationships	G. Weiler G. Garner L. Martin W. Regelin	USFWS-ANWR Fairbanks ADF&G, Fairbanks	ANWR progress Report No. FY85-5[c]
		Prey utilization by wolves in two drainages within the Arctic National Wildlife Refuge and a preliminary description of wolf pack behavior around the den in the Kongakut River drainage	H. Haugen	Univ. Alaska, Fairbanks	ANWR Progress Report No. FY85-4[c]
	1985	Food habits of wolves in the Arctic National Wildlife Refuge	G. Weiler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-19[d]
		Ecology of wolves on Arctic National Wildlife Refuge	G. Weiler	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-7[d]
		Food habits of wolves on the Kongakut River	H. Haugen	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY86-3[d]
Other Carnivores	1983	Ecology of arctic foxes at Demarcation Bay	B. Burgess	Univ. Alaska, Fairbanks	M.S. Thesis
	1984	Distribution and abundance of wolverines in the northern portion of the Arctic National Wildlife Refuge	F. Mauer	USFWS-ANWR, Fairbanks	ANWR Progress Report No. FY85-16[c]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
Small Mammals	1983	Microtine rodents and ground squirrels of the coastal plain and foothills of the Arctic National Wildlife Refuge: distributions, densities, and general ecology	C. Babcock	Univ. Alaska, Fairbanks	ANWR Progress Report No. FY84-3[b]
	1984	Microtines and ground squirrels of the coastal plain of the Arctic National Wildlife Refuge: Notes on distributions, densities, and general ecology	C. Babcock	Univ. Alaska, Fairbanks	ANWR Progress Report No. FY85-15[c]
		Small mammal specimen collecting	S. McDonald	Univ. Alaska, Fairbanks	Results on file, ANWR, Fairbanks
	1985	Microtine rodents and ground squirrels of the coastal plain and foothills of the Arctic National Wildlife Refuge: distribution, densities, and general ecology	C. Babcock	Univ. Alaska, Fairbanks	ANWR Progress Report No. FY86-15[d]
		Food habitats of microtine rodents on the Arctic National Wildlife Refuge	C. Babcock	Univ. Alaska, Fairbanks	ANWR progress report Report No. FY86-20[d]
		Vegetation patterns and microtine rodent use of tundra habitats in northeastern Alaska	C. Babcock	Univ. Alaska, Fairbanks	M.S. Thesis
Fish					
	1982	Aquatic studies on the north slope of the Arctic National Wildlife Refuge 1981 and 1982	M. Smith R. Glesne	USFWS-Fairbanks Fishery Resources (FFR)	FFR Progress Report FY83-1[a]
		Environmental characterization and biological use of lagoons in the eastern Beaufort Sea		L.G.L. Ecological Research Associates Inc., Bryant, Texas	Final report for Outer Continental Shelf Environ. Assessment program NOAA, Juneau
	1983	Fisheries studies on the north slope of the Arctic National Wildlife Refuge, 1983	D. Daum P. Rost M. Smith	USFWS-FFR, Fairbanks	FFR Progress Report No. FY 84-1[b]
		Abundance, distribution, and diversity of aquatic macroinvertebrates on the north slope of the Arctic National Wildlife Refuge, 1982 and 1983	R. Glesne S. Deschermeier	USFWS-FFR, Fairbanks	FFR Progress Report No FY84-2[b]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
		Aquatic survey of the Kaktovik dredging operation, 1983	P. Craig	L.G.L. Consulting Services Ltd., Anchorage	Final report to North Slope Borough on file, ANWR, Fairbanks
	1984	Fisheries investigations on the Arctic National Wildlife Refuge, Alaska, 1984	R. West D. Wiswar	USFWS-FFR, Fairbanks	FFR Progress Report No. FY85-1[c]
		Aquatic survey of the Kaktovik dredging operation, 1983 and 1984	P. Craig	L.G.L. Consulting Services Ltd., Anchorage	Final report to North Slope Borough on file, ANWR, Fairbanks
		The ecology of tundra ponds of the Arctic coastal plain: a community profile	J. Hobbie	Ecosystems Center Marine Biological Laboratory, Woods Hole, MA	Final Report FWS/OBS-83/25 USFWS, Washington, D.C.
	1985	Fisheries investigations in Beaufort Lagoon, Arctic National Wildlife Refuge	D. Wiswar R. West	USFWS-FFR, Fairbanks	FFR Progress Report No. FY86-1[d]
		Fall movements and overwintering of arctic grayling in the Arctic National Wildlife Refuge	D. Wiswar R. West T. Stevens M. Smith	USFWS-FFR, Fairbanks	FFR Progress Report No. FY86-2[d]
		Notes on the age, growth, distribution, and summer feeding habits of arctic flounder in Beaufort Lagoon, Arctic National Wildlife Refuge	D. Wiswar	USFWS-FFR, Fairbanks	FFR Progress Report No. FY86-3[d]
		Baseline histopathological, parasite and contaminant studies of four arctic fish species in Beaufort Lagoon, Arctic National Wildlife Refuge	R. West	USFWS-FFR, Fairbanks	FFR Progress Report No. FY86-4[d]
		Fisheries investigations on the Kongakut River, Arctic National Wildlife Refuge	S. Deschermeier T. Stevens D. Wiswar R. West	USFWS-FFR, Fairbanks	FFR Progress Report No. FY86-5[d]
		The freshwater food habits of pre-smolt and small resident arctic char in streams in Arctic National Wildlife Refuge, 1982 - 1985	T. Stevens S. Deschermeier	USFWS-FFR, Fairbanks	FFR Progress Report No. FY86-6[d]

Table 1. Continued.

Resource	Year	Project title	Investigators	Affiliation	Reports
Human Culture and Lifestyle					
	1982	Preliminary archaeological and historical resource reconnaissance of the coastal plain of the Arctic National Wildlife Refuge		Edwin Hall and associates	Report on file, ANWR, Fairbanks
		Kaktovik area cultural resource survey	D. Libby	Univ. Alaska, Fairbanks	Preliminary report to North Slope Borough, on file, ANWR, Fairbanks
		Subsistence land use baseline for eastern and central north slope communities, Alaska	S. Pederson	ADF&G-Subsistence, Fairbanks	Work in progress
		Sociocultural assessment of proposed ANWR oil and gas exploration	R. Worl P. McMillan T. Lonner S. Beard	AEIDC, Anchorage	Report completed, for AEIDC, Anchorage on file, ANWR, Fairbanks
	1984	Caribou hunting: dimensions and recent harvest patterns in Kaktovik, northeast Alaska	S. Pederson M. Coffing	ADF&G-Subsistence, Fairbanks	Final report: Technical paper No. 92 ADF&G Division of Subsistence, Fairbanks, on file, ANWR, Fairbanks

[a] in Garner and Reynolds (1983)
[b] in Garner and Reynolds (1984)
[c] in Garner and Reynolds (1985)
[d] in Garner and Reynolds (1986)

C - Caribou PB - polar bear M - muskox PBS - polar bear * - not scientific study already cited

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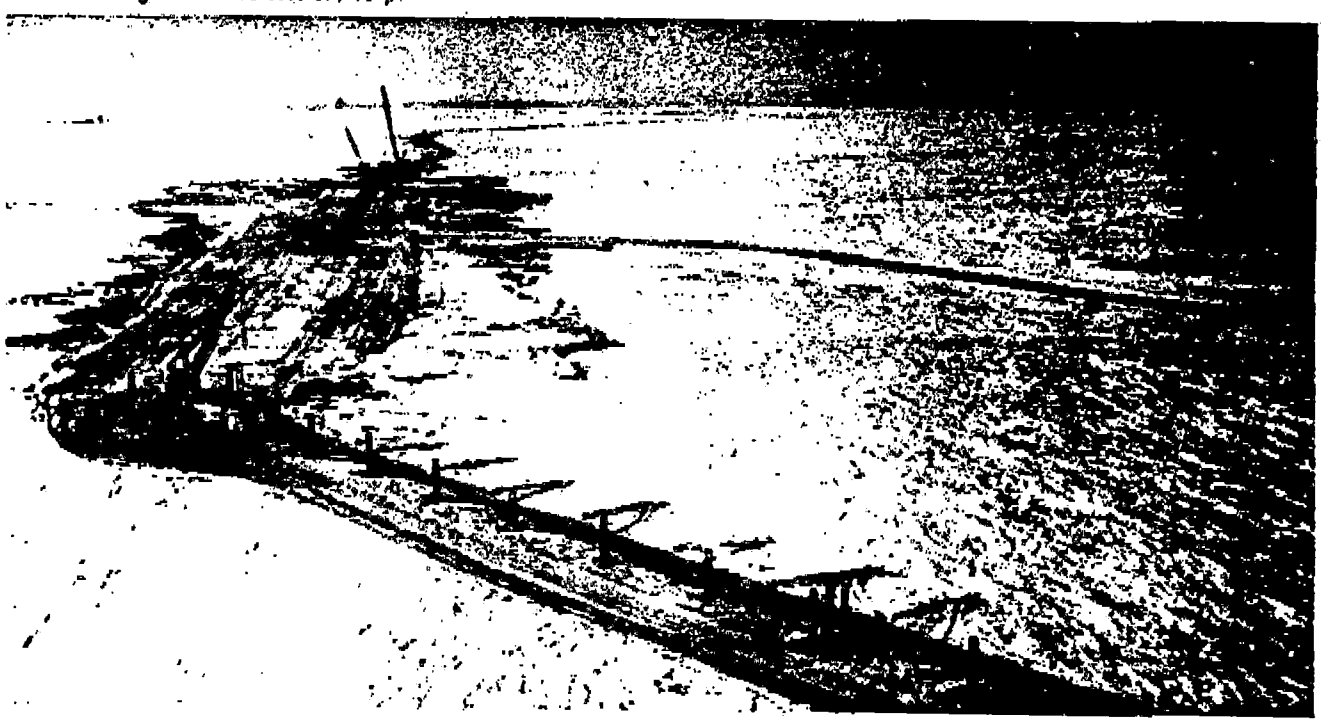

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O-other C-caribou M-muskox B-birds *-baseline study or not a scientific paper
PB-polar bear

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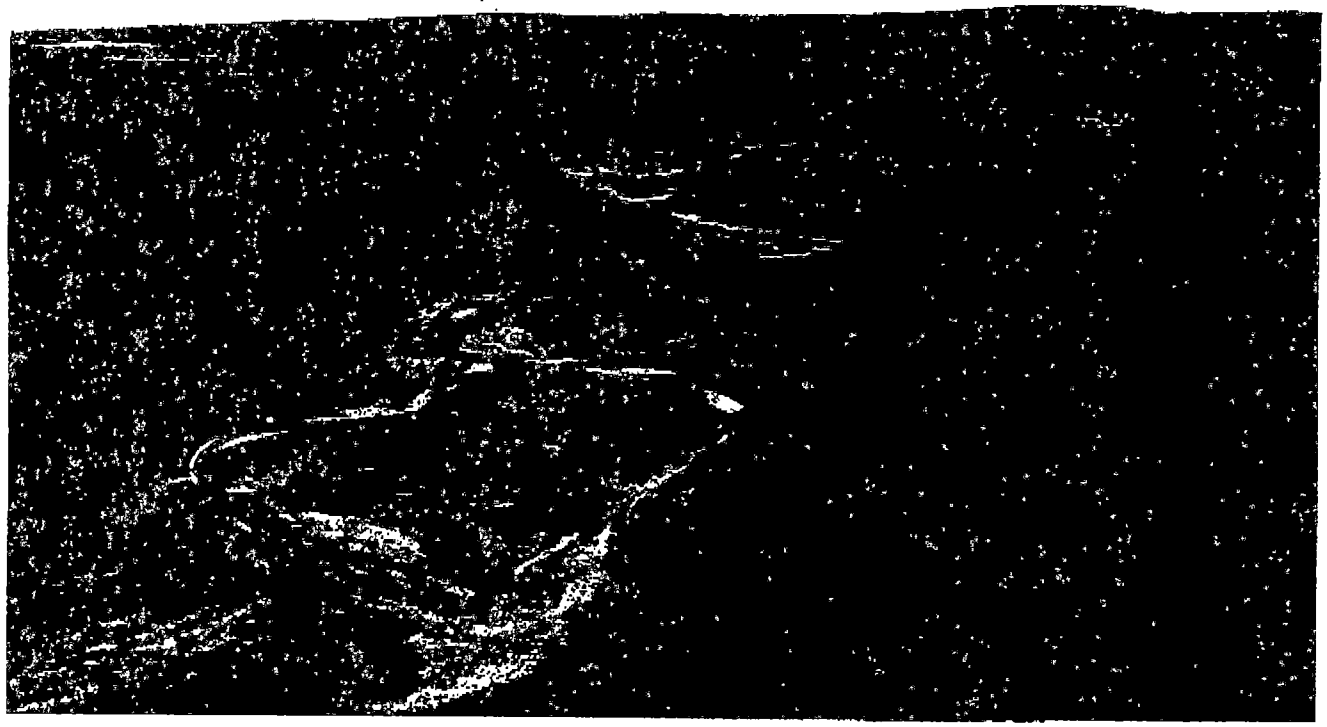

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