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Administrative Policy

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REMARKS:☐ Urgent☒ For your review☐ Reply ASAP☐ Please comment

Climate Change and National Security

Discussion:

Mr. Steinberg (NSC), Ms. Goodman (DoD), and Mr. Pomerance (State) discussed climate change and national security in a conference call at 1330, on October 10, 1997. The discussion was based on an option paper written by State (Atch 1). The options discussed in the paper are summarized below:

- Option 1: Cap with Exemption.** Accept a national greenhouse gas cap, but provide specific exemption/exclusion for military operations and training.
- Option 2: Cap with Safety Valve.** Accept a national cap, but limit the amount any country would be obligated to pay to comply with its obligation
- Option 3: Cap with no exemption.** Accept a national cap without any provision for protecting national security

The consensus of the NSC, DoD, and State discussion was to recommend to the President that Option 1 be pursued for protecting national security¹. This will protect the Nation's ability to conduct military operations with trained forces. There was also consensus on the need for authority to begin discussions with NATO militaries and other US allies so that the US is not the only advocate for national security. The goal of these discussions will be to find an ally that would be willing to propose a national security provision and to encourage other countries provide support. To allow time to contact other countries, DoD and State request authority to begin discussions as soon as possible.

Recommendations:

1. Include a national security provision that protects the Nation's ability to conduct military operations with trained forces as part of the USG position on climate change.
2. Work with US allies identify support for protecting national security.

¹ During the discussion, Ms. Goodman noted that Options 1 and 2 are not mutually exclusive. The USG may elect to pursue a safety valve for policy reasons unrelated to national security, but this does not preclude the need to pursue a specific national security provision (Option 1).

Climate Change and National Security Issues

A concern has been raised by DoD that capping greenhouse gas emissions under the Kyoto agreement could affect our national security. This view is based on the fact that emissions of greenhouse gases are considerably increased during military activity, largely as a consequence of ramped-up systems operations. For the United States, the numbers are relatively small: DoD emissions during normal operations represent less than one percent of the U.S. total, and even during significant overseas deployments (e.g., Iraq), did not rise to more than about 1.5 percent. While in the United States, we may be willing to pay the incremental cost of such increased emissions in order to participate in various military operations, other countries may not be willing to make such a choice. Given that most operations are multi-national, creating a global cap may create a situation in which countries may be forced to choose between participation in a military operation or meeting a global climate change treaty mandate. Three options are suggested to address this issue.

Option 1: Cap with Exemption.

Accept a greenhouse gas cap, but provide a specific exemption/exclusion for military operations (either complete or limited to aspects of national or collective security, humanitarian activities, peacekeeping, peace enforcement, United Nations, or NATO or other multinational actions). A number of technical "fixes" would be required to the U.S. text to accommodate this alternative; these are not discussed here. The option has the advantage of providing surety that neither our military operations nor those of other countries would be compromised by the need to limit greenhouse gas emissions under the treaty. However, it could be exceedingly difficult to negotiate internationally – and could also give rise to calls for other exemptions or exclusions.

Option 2: Cap with Safety Valve.

Accept a cap, but limit the amount that any country would be obligated to pay to comply with its obligation. While this option does not mitigate the need to include the costs of increased emissions in planning a peacekeeping force, it will limit the cost – and the cost can be approximately determined in advance. This would allow countries to exceed their emissions budgets for military activity without demanding compensating reductions in other sectors in order to remain in compliance. However, this option would also be extremely difficult to negotiate internationally – and has already received vocal opposition from many in the environmental community (independent of the national security concern which it might partially address).

Option 3: Cap with no exemption.

In this option, a cap would be adopted, and no special provisions would be incorporated to accommodate national security. This alternative assumes that global climate change should be taken into account in making military operations decisions, and that it would be inappropriate to exempt any sector or activity from a greenhouse gas emissions obligation. This option requires no change in the existing U.S. protocol language; however, it clearly does not address the concern raised by DoD.

If the United States chooses to move this issue forward for inclusion in the Kyoto agreement, it will need to be done promptly. Specific textual language will need to be developed, allies (perhaps at first within NATO) will need to be encouraged to support (or perhaps even to offer) this proposal, and a negotiating strategy will need to be conceived and implemented. A decision must therefore be made promptly on the course of action to take on the substantive concern raised.

Climate Change and National Security Adjusting Baselines

Mr. Steinberg (NSC), Ms. Goodman (DoD), and Mr. Pomerance (State) discussed climate change and national security in a conference call at 1330, on October 10, 1997. During the discussion, Mr. Steinberg requested clarification on the magnitude of the DoD's greenhouse emissions attributable to operations and how this would impact the US baseline. In 1990, the US reported greenhouse gas emissions of 1458 million metric tons carbon equivalent (MMTCE). DoD's operations and training in 1990 resulted in greenhouse gas emissions of approximately 15.5 MMTCE within the US.¹ This is approximately 1% of the 1990 US baseline.

Adjusting Baselines: If military emissions are excluded from the protocol, we could attempt to adjust the baseline for each nation:

Option 1: Adjust the baseline by subtracting 1990 military emissions from the national baseline. For the US, military operations and training resulted in greenhouse gas emissions of 15.5 MMTCE. This would be subtracted from the reported US total.

Option 2: Adjust the baseline using data from a more recent year. This option could be necessary if nations do not have accurate data for 1990 military emissions. For example, if 1996 data are used to adjust baselines, the US would have a smaller downward adjustment. DoD fuel use has decreased by 36% worldwide since 1990. This results from a smaller force structure and the retirement of the oldest, least fuel efficient weapon systems. By 1996, DoD domestic greenhouse gas emissions from operations and training dropped to 11.1 MMTCE while overall US greenhouse gas emission grew by 12%. As a result, in 1996, DoD operations and training emissions amounted to 0.7% of total US emissions.

¹ In 1990, DoD used 171 million barrels of fuel. Of this amount, approximately 20% was used outside the US. Fuel used by DoD outside the US counts in the baseline of the country where the fuel is used. The remaining fuel, 137 million barrels, represents DoD's 1990 fuel usage within the US and accounts for 15.5 million metric tons carbon equivalent (MMTCE) of greenhouse gas emissions. This is the amount included in the US's 1990 baseline, which is 1458 MMTCE. Thus, DoD's operational emissions for 1990 represent about 1.06% of total US emissions.



NEWS RELEASE

OFFICE OF ASSISTANT SECRETARY OF DEFENSE
(PUBLIC AFFAIRS)
WASHINGTON, D.C. - 20301
PLEASE NOTE DATE

Cabinet DoD

IMMEDIATE RELEASE

September 25, 1997

No. 513-97

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(703)697-5737(public/industry)

SECRETARY OF DEFENSE RECOGNIZED BY EPA ADMINISTRATOR FOR LEADERSHIP IN PROTECTING THE OZONE LAYER AND ADDRESSING CLIMATE CHANGE

In a ceremony held at the Pentagon today, Secretary of Defense William S. Cohen was recognized by Environmental Protection Agency Administrator Carol Browner for Department of Defense accomplishments in protecting the ozone layer and addressing global climate change issues. Browner presented Cohen with EPA's "*Best-of-the-Best Stratospheric Ozone Protection Award*." This award pays tribute to the Department of Defense's outstanding efforts to reduce its use of ozone depleting substances.

The ceremony also highlighted DoD's leadership in reducing greenhouse emissions tied to global climate change. The Department of Defense has made significant progress in reducing its energy use and showing leadership in the technological innovation that will be necessary to combat global climate change. The Department of Defense has reduced its average facility energy use by 15 percent from 1985 to 1996, more than any other large federal agency.

In remarks delivered at the ceremony, Cohen said, "As the Armed Forces protect national security, they are also helping to protect global security in the larger sense – the health of the planet we pass on to our children."

Browner and Sherri W. Goodman, deputy under secretary of Defense for Environmental Security also gave remarks. Browner emphasized the importance of now turning the focus to climate change. She said, "The Clinton Administration's efforts to prevent global warming are critical to the health and, yes, the security of future generations of Americans. It is only fitting that the Defense Department should take a prominent role in something that is so essential to the quality of life we will pass on to our children and their children to come."

Several individuals, corporations and military organizations were also recognized for their contribution to the Department of Defense's extraordinary success.

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INDIVIDUAL WINNERS

Stephen P. Evanoff, manager, External Affairs, Lockheed Martin Corporation, F-16 Program, was the first to achieve 100 percent elimination of ozone depleting chemicals (ODC) from military aircraft manufacturing.

Joseph R. Felty, senior technical advisor, Ratheon Texas Instruments Systems (RTIS) eliminated ODC in the manufacture and assembly of all RTIS-produced military electronic hardware.

Joel Krinsky, director, Environmental Engineering, Naval Sea Systems Command established and managed the Navy's \$800 million program to eliminate ODC from shipboard cooling and fire protection systems.

Maj. E. Thomas Morehouse Jr., USAF (Retired), currently with the Institute for Defense Analyses ensured the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer included Halon and, subsequently, managed Air Force's compliance with the Protocol.

Ronald W. Sibley, program manager, DoD Ozone Depleting Substances Reserve, Defense Logistics Agency reclaimed five million pounds of ODC, and saved \$5 million through the seizure of illegal ODC imports, to ensure readiness of DoD weapon systems while protecting the environment.

Daniel Verdonik, materials scientist, Hughes Associates, Inc. spearheaded adoption of the International Standards Organization Halon purity standard, resulting in Halon supply management, through recycling and strategic storage, to meet essential military requirements.

Gary D. Vest, principal assistant deputy under secretary of Defense (Environmental Security) served as the premier force, both domestically and internationally, in the Department's unwavering support for, and implementation of, global environmental protection through the "Montreal Protocol on Substances that Deplete the Ozone Layer."

ORGANIZATIONAL WINNERS

Vance Coffman, chief executive officer and vice chairman, Lockheed Martin Corp., represented by John Manuel, vice president for business development led technical innovations and accomplishments in eliminating ODC from aerospace and electronic manufacturing in the areas of solvents and degreasing agents.

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Dave Welp, president, Raytheon Texas Instruments Systems (RTIS), represented by Michael J. Leake, environment, safety and health director, RTIS worked with the German co-producer of the High Speed Anti-Radiation Missile (HARM) to make it the first international military hardware supplier to eliminate all ODC, reducing usage from 715 pounds/year to zero in three years, in the manufacture of missile systems.

Ms. Renata F. Price, assistant deputy chief of staff for Research, Development, and Acquisition, Army Materiel Command, representing the Army Acquisition Pollution Prevention Support Office developed the Strategic Guidance and Planning for Elimination of Ozone-Depleting Chemicals from US Army Applications to become the leading guide for eliminating ODC in military ground operations and installations worldwide.

Capt. Bruce W. Buckley, USN, commanding officer, Naval Research Laboratory served as the premier Navy center for identifying, testing, demonstrating, and validating ODC replacements critical to Navy safety and survivability.

Capt. John H. Preisel, USN, commanding officer, Naval Surface Warfare Center, Carderock Division, used new technology to eliminate 90,000 pounds ODC from the air-conditioning and refrigeration systems aboard 100 U.S. Navy ships worldwide.

Col. Jeffrey J. Norton, USAF, program manager, Titan Launch Program Office, represented by Brig. Gen. James Beale, USAF, director, space & nuclear deterrence, office of the assistant secretary of the Air Force (Acquisition), eliminated 2.9 million pounds of ODC associated with all US commercial production and launch of large solid rocket motors, and avoided \$800 million in ODC-related costs to the Titan manufacturing program alone.

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NEWS RELEASE

**OFFICE OF ASSISTANT SECRETARY OF DEFENSE
(PUBLIC AFFAIRS)**
WASHINGTON, D.C. - 20301
PLEASE NOTE DATE

DoD

IMMEDIATE RELEASE September 25, 1997 No. 516-97
(703)695-0192(media)
(703)697-573 (public/industry)

**Remarks Prepared for Delivery
Deputy Under Secretary Of Defense for Environmental Security
Sherri W. Goodman
Climate Change Best-of-the-Best for the
Stratospheric Ozone Protection Awards**

Welcome, and thank you all for coming to the Pentagon. We are very honored to have the Secretary of Defense, and the Administrator of the Environmental Protection Agency together today, joining forces to protect the environment.

Protecting the global environment requires commitment and teamwork. Commitment to conducting business in an environmentally sustainable manner, and teamwork to make that vision a reality. We are here today to celebrate that commitment and teamwork.

Administrator Browner has joined us to present the "Best-of-the-Best" Stratospheric Ozone Protection Award to Secretary Cohen for Defense Department leadership and excellence.

The Defense Department is receiving this recognition for our outstanding achievements in reducing the use of ozone depleting substances. The DoD and its people have won more EPA awards for protecting the ozone layer than any other organization in the world.

Leadership and technological innovation are at the heart of our success. We believe the very same leadership and technological innovation will help us to meet the current worldwide challenge to combat global climate change. I will speak to that in a moment.

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But first, I would like to recognize and acknowledge the "Best-of-the-Best" Defense Department international leaders with us today. They received awards in Montreal earlier this month. These individuals and organizations have shown remarkable leadership, technological innovation, and commitment.

These are the accomplishments of Defense Department organizations and industry leaders:

- The Army established a number of Ozone Depleting Chemicals (ODC) policies unique within DoD. It is the only branch to complete elimination of Class I ODC from all currently fielded weapon systems.

- The Navy has the world's largest installed bases of CFC-12 and CFC-114 AC&R systems aboard its fleet of ships. To ensure protection of the environment, the Navy established an aggressive program to convert CFC-12 and CFC-114 systems to ozone friendly refrigerants. Additionally, the naval research lab identified and qualified a non-ozone depleting gas to replace Halon 1301, resulting in a 60 percent reduction in emissions of Halon 1301.

- The Air Force Titan IV program now the launch program office, assessed, reduced, and eliminated ODS use associated with the design, production and launch preparation of large solid rocket motors.

- By 1995 Raytheon Texas Instruments Systems was able to eliminate its reliance on ODS in manufacturing operations. They have led the way in testing, developing and implementing alternatives such as controlled atmosphere soldering and semi-aqueous and batch solvent cleaning of circuit boards and other defense system components.

- Nine Lockheed Martin companies have been recognized for their technology innovations and accomplishments in eliminating Class I ODCs. These technological advances have helped the department update its military specifications. Among other accomplishments, they eliminated the ODC solvents from manufacturing and maintenance of aircraft tubing and honeycomb core structures by replacing vapor degreasing with aqueous cleaners. They also patented ODC-free cleaning technologies for aerospace and electronics manufacturing, and was the first to achieve 100 percent elimination of ODCs from military manufacturing---the F-16 program.

- These accomplishments could not have taken place without the hard work and vision of the individuals we are recognizing today.

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- Steven Evanoff, Lockheed Martin Corporation, for 100 percent elimination of Ozone Depleting Chemicals from military aircraft manufacturing for the F-16 Program.

- John Manuel, representing Lockheed Martin Corporation, as an organizational winner for technical innovation in the areas of solvents and degreasing agents

- Joe Felty, Raytheon TI Systems, for advances in evaluating cleaning technologies.

- Mike Leake, representing Raytheon TI Systems, as an organizational winner for being the first international military supplier to eliminate ODCs in the manufacture of missile systems.

- Gary Vest, my deputy, recognized for effective government leadership.

- Thomas Morehouse Jr., with the Air Force, instrumental in getting halons included in the 1987 Protocol.

- Ronald Sibley, demonstrated leadership at Defense Logistics Agency in Ozone Depleting Substances (ODS) banking and recycling.

- Joel Krinsky , demonstrated leadership for Navy's ODS Management and Elimination Program.

- Bruce w. Buckley, Commanding Officer, Naval Research Laboratory, as an organizational winner for being a premier Navy center for identifying, testing, demonstrating, and validating ODC replacements.

- John H. Preisal, Commanding Officer, Naval Surface Warfare Center, Carderock, as an organizational winner for implementation of new technologies to eliminate 90,000 pounds of ODCs from air conditioning and refrigeration systems aboard U.S. Navy ships worldwide.

- Daniel P. Verdonik, with the Army, who spearheaded a government/industry effort to establish a new international standard for recycled halons.

- Renata F. Price, representing the Army Material Command, an Organizational winner for strategic guidance and planning in pollution prevention.

-MORE-

- Jim Beale, representing the Titan Launch Program, as an organizational winner for eliminating 2.9 million pounds of ODCs associated with all U.S. commercial production and launch of large solid rocket motors, and avoided \$800 million in ODC-related costs to the Titan manufacturing program

Thank you for your hard work. Your efforts have had big pay-off for Defense and the environment.

And this provides incentive for us to face new challenges. Today, one of the biggest is global climate change. The Department will continue to provide leadership in balancing environmental protection and national security in this area. Already we have steadily reduced the average energy use at our facilities, and we have robust programs that focus on reducing energy use and fuel consumption while improving performance in our weapon systems and facilities.

For the technology buffs with us today, let me show off a sample technology.

In this video you see advanced aircraft engine technology that is being developed by the Air Force, Navy, Army, DARPA, NASA and the major U.S. turbine engine companies. They are developing engine technology for the next generation of fighters, bombers and transport aircraft. The goal is to increase engine efficiency and reduce life-cycle costs.

This technology initiative will also reduce fuel consumption by 40 percent in these engines, thus reducing the emissions that cause climate change.

I urge you to take a look at the display in the back of the room.

We are working cooperatively with other agencies and the public to ensure that we can meet our commitments to environmental protection while maintaining the flexibility required to preserve military readiness.

The Environmental Protection Agency is one of the agencies with which we work closely. This is in large part due to the leadership demonstrated by the administrator and her people. I would particularly like to thank Steve Anderson of the EPA for his tireless efforts in helping DoD meet the challenges of the Montreal Protocol. His cooperation with DoD is the model for what we must do to address global climate change. -- It is now a great pleasure to introduce EPA Administrator, Carol Browner.

-END-

Cabinet-Defense

20 Aug 1997

MEMORANDUM FOR LIZ BAILEY

FROM: Celia Hoke, OSD/PA

SUBJECT: SecDef Event Supporting the Climate Change Initiative

At the September 14, 1997, Awards Conference in Montreal, Canada, which marks the tenth anniversary of the Montreal Protocol on Substances that Deplete the Ozone Layer, the Department of Defense will be recognized by the Environmental Protection Agency for its outstanding technical achievements in protecting the environment. Following this event, it is expected that Secretary Cohen will host EPA Administrator Browner at the Pentagon for a ceremony to recognize the DoD Stratospheric Ozone Protection Award Winners and to focus on the department's 10 years of stratospheric protection initiatives.

Department of Defense Climate Change Outreach Strategy

Develop DoD Climate Change messages

- Formulate initial key messages by end of July
- Identify DoD programs that support or are affected by Climate Change
- Formulate more detailed messages by late August

Identify opportunities for DoD leadership to give speeches about Climate Change

- Secretary of Defense (possible opportunities)
 - September 14, 1997 SecDef accept award to DOD as leader in the reduction of Ozone Depleting Substances at the 10th anniversary of the signing of the Montreal Protocol.
 - November 7, 1997 Keynote at 1st International Military Conference on Military Aspects of Climate Change.
- Other opportunities: To be identified
- Deputy Under Secretary of Defense for Environmental Security
 - August 5, 1997 American Defense Preparedness Association Pollution Prevention Conference
 - November 11, 1997 Forbes Environmental Conference
 - Other opportunities to be identified and cultivated
- Principle Deputy Under Secretary of Defense for Environmental Security
 - October 16, 1997 Society of American Military Engineers
 - November 10, 1997 Forbes Environmental Conference
 - November 14, 1997 Society of American Military Engineers
- Other DoD leadership: Opportunities to be identified

Communicate DoD messages in press

- Internal press
 - Conduct interviews with print, TV and radio media
 - Write editorials for print media
 - Produce TV news stories
- External press
 - Conduct interviews with trade press
 - Write articles in select journals showcasing successes and giving key messages
 - Conduct local interviews when traveling to installations and communities

Address Climate Change with DoD key audiences

- Key audiences include:
 - DoD leadership
 - DoD personnel and families on installations
 - Communities near installations
 - NGO's
 - Defense industry
- DoD leadership
 - Create dialogue to educate leadership
- DoD personnel and families on military installations
 - Create and publicize web site on Climate Change issue on Defense Environmental Network and Information Exchange (DENIX)
 - Establish chat room on DENIX to establish dialogue on climate change with key audiences
 - Work with Services to establish a Climate Change Education Week on installations to showcase successes within DoD and education DoD personnel, families and surrounding communities
 - Identify "local surrogates" to discuss what installations are doing to combat climate change, and to discuss the climate change issue in general terms
 - DUSD(ES) and senior DUSD(ES) staff meet with installation personnel, Restoration Advisory Board members and others in the community on existing trips
- Communities surrounding military installations
 - Collaborate with community groups on climate change education events
- NGO's
 - Work with NGO's to identify educational materials to give to installations for climate change events
 - Work with NGO's to identify speech and press opportunities for DoD leadership
- Defense industry
 - Propose dialogue with defense industry through defense associations