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EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
Washington, D.C. 20503

SPECIAL

July 2, 1993

10 pgs

LEGISLATIVE REFERRAL MEMORANDUM

LRM #I-759

TO: Legislative Liaison Officer -

EDUCATION - John Kristy - (202)401-2670 - 207
HHS - Frances White - (202)690-7760 - 328
HUD - Edward J. Murphy, Jr. - (202)708-1793 - 215
JUSTICE - Shelia F. Anthony - (202)514-2141 - 217
LABOR - Robert A. Shapiro - (202)219-8201 - 330
TRANSPORTATION - Tom Herlihy - (202)366-4687 - 226
TREASURY - Richard S. Carro - (202)622-1146 - 228
VA - Robert Coy - (202)535-8113 - 229
NEC - Sonia Mathews - (202)456-6722 - 429
OPM - James N. Woodruff - (202)606-1424 - 331
ACTION - Stewart A. Davis - (202)606-4833 - 244
CNCS - Terry Russell - (202)724-0600 -
PEACE CORPS - Bob Martin - (202)606-3114 - 254

FROM: JANET R. FORSGREN (for) *Janet R. Forsgren*
Assistant Director for Legislative Reference

OMB CONTACT: Chris MUSTAIN (395-3923)
Secretary's line (for simple responses): 395-7362

SUBJECT: DEFENSE Proposed Report RE: HR 1193, National
Voluntary Service and Educational Opportunity
Act of 1993

DEADLINE: 11:00 AM July 9, 1993

COMMENTS: In addition to the proposed DOD report, a cleared
report from VA on HR 1193 is attached for your information.

OMB requests the views of your agency on the above subject before
advising on its relationship to the program of the President, in
accordance with OMB Circular A-19.

Please advise us if this item will affect direct spending or
receipts for purposes of the the "Pay-As-You-Go" provisions of
Title XIII of the Omnibus Budget Reconciliation Act of 1990.

Page 2
LRN #I-759

CC:

Don Gessaman
Tom Stanners
Wendell Waites
Barbara Selfridge
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Pam Van Wie
Todd Grams
Justin Kopca
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Delphine Motley
Janet Forsgren

**DRAFT
FOR
OMB A-20
REVIEW**

Honorable G.V. (Sonny) Montgomery
Chairman, Committee on Veterans' Affairs
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

This is in response to your March 11, 1993 request for the views of the Department of Defense on H.R. 1193, "National Voluntary Service and Educational Opportunity Act of 1993", 103d Congress, a bill "To establish a program of voluntary national service for young people and senior citizens".

H.R. 1193 would establish a Citizen Corps with three national service options: Civilian Service, Service in the Armed Forces, and Senior Service. An option for Citizen Corps members to serve in the Armed Forces would permit individuals who complete prescribed periods of honorable active or Reserve enlisted service to receive financial assistance ranging from \$12,000 to \$24,000 to be used for education, vocational training, or the purchase/construction of a home. Such participants would earn 66 percent of basic military compensation. However, they would not earn current in-service or veterans' education

benefits (based upon their period of national service) while enlisted in the Armed Forces.

The Department has no objection to the establishment of a Citizen Corps with service options in the Civilian Service and the Senior Service. However, the Department opposes that part of the bill providing for enlistment of Citizen Corps members in the Armed Forces. The Department does not believe that such a program is needed to meet current personnel requirements; in fact, we believe that implementation of such a program would damage unit readiness by creating a separate class of people in the Armed Forces--an action that would jeopardize cohesion and morale.

The volunteer military is working as intended, and should meet defense needs for the foreseeable future. We continue to meet our recruiting objectives, and the social composition of the Armed Forces compares favorably with that of society as a whole. For example, Blacks constituted 17 percent of enlisted recruits for Fiscal Year 1992--roughly 3 percentage points more than their representation in the civilian youth population. Members of "other" racial minorities (e.g., Native Americans, Asians, Pacific Islanders) were more highly represented in recruits (6 percent) than in the civilian youth population (4 percent). Consequently, we see no merit in pursuing a program to make the composition of the Armed Forces more representative of the country at large, or to assist the Department in meeting its military

personnel requirements. Both of these stated objectives are being met now.

Moreover, the establishment of a Citizen Corps military option would create a separate category of people in uniform with compensation and with entitlement to educational benefits that are different from their military peers. Under H.R. 1193, compensation for members of the Citizen Corps would be set at two-thirds the level of basic pay and allowance for regular members of the Armed Forces; additionally, there would be no educational entitlement under the Montgomery GI Bill (since these members would receive a pre- or post-service benefit of financial assistance for education, training or housing).

Finally, the Department does not agree that the Senior Reserve Officers' Training Corps (SROTC) program should be expanded to accept individuals who are eligible to enlist for service in the Armed Forces as a member of the Citizens Corps in advance of their (enlisted) military service. SROTC prepares selected students for commissioned service, not enlisted service. Today, SROTC production is being reduced to align with reductions in military manpower; it appears ill-advised to expand the SROTC program to accommodate those who will not enter commissioned service, particularly in light of the average cost to the Department of a non-scholarship SROTC cadet--about \$10,000 over a 4-year period.

In sum, we continue to rely on the all-volunteer force because of its demonstrated ability to generate the number and quality of people

needed to meet the demands of our national strategy during a period characterized by austere budgets. Currently, there is no demonstrated need for a national service option to satisfy our recognized military requirements; therefore, we recommend against the enactment of this bill.

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the presentation of this report for the consideration of the Committee.

Sincerely,

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HR 1193 - R01-04/93.03

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Brown

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THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

MAY 19 1993

The Honorable G. V. (Sonny) Montgomery
Chairman, Committee on Veterans' Affairs
House of Representatives
Washington, D. C. 20515

Dear Mr. Chairman:

I am pleased to respond to your request for the views of the Department of Veterans Affairs (VA) and our estimate of costs concerning H. R. 1193, a bill "To establish a program of voluntary national service for young people and senior citizens."

VA appreciates the intent of H. R. 1193 to engage our Nation's youth and senior citizens in voluntary national service, with all the obligations and benefits that entails both for the individual and for our society. President Clinton has often stated the importance and long-term benefits of investing in America and the value of national service.

Indeed, reflecting the fact that national service is one of his highest priorities, the President on May 6th transmitted to Congress two legislative proposals designed to encourage community service and expand educational opportunities.

The "National Service Trust Act of 1993" establishes a new government Corporation for National Service, created by combining the Commission on National and Community Service and ACTION. The centerpiece of this initiative is a new program under which participants will receive educational benefits in exchange for working in national service positions. For each term of service, participants will receive \$5,000 in education benefits that can be used to pay off student loans or pursue post-secondary school education and training. A term of service is 1 year of full-time or 2 years of part-time service. Participants can serve up to 2 years.

Under the companion bill, the "Student Loan Reform Act of 1993," the current student loan system will be reformed to provide a range of flexible repayment plans. These plans will allow students to enter lower-paying community service jobs without worrying about their debt burden.

We note that H. R. 1193, unlike the President's initiative, includes an option of service in the Armed Forces. Under this option, individuals who elect to serve in the Armed Forces could

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Honorable G. V. (Sonny) Montgomery

serve 2 years of active duty with 2 years in the Selected Reserve and 4 years in the Individual Ready Reserve, or could choose 8 years in the Selected Reserve. While serving, a participant would receive approximately two-thirds of the basic pay and allowances otherwise applicable to regular members of the Armed Forces with the same pay grade and years of service. Upon honorable completion of the active duty tour, a participant may receive up to \$24,000 for education or housing benefits. An individual whose volunteer tour consists entirely of Selected Reserve service may, after satisfactory completion of 1 year's service, receive up to \$12,000 of such benefits. Our Department would be made responsible for administering such benefits.

VA defers to the views of the Department of Defense as to whether the proposed Citizens Corp service in the Armed Forces is necessary to meet the manpower requirements of the military, or otherwise would be an appropriate, effective component of a national volunteer service program. However, VA, as the Department made responsible for providing benefits under the Armed Forces component of H. R. 1193, notes with concern the substantial disparity between the education and housing benefits that would be afforded Citizens Corp members and those we currently provide to regular veterans, including veterans of wartime service.

We note, for example, that the proposed \$24,000 education benefit grant for service under the Armed Forces option is far more generous than the \$14,000 benefit (less the current military pay reduction) allowed under the Montgomery GI Bill for a 3-year active duty obligation. Likewise, a \$24,000 housing grant, as proposed, could be a much more valuable (and costly) benefit than the current VA home loan guaranty benefit. The Citizens Corp recipients would have much greater latitude than current veterans on spending the money for the purchase or construction of a home, and would have \$24,000 instant equity in a newly purchased home. This hardly seems equitable, particularly in view of the risks and deprivations suffered by many veterans of wartime service.

Finally, this measure lacks the specificity needed to determine legislative intent in such critical areas as the form, frequency, and funding source of the education and housing benefits. Congressional policy concerning the use of these benefits would have to be further developed and specific provisions of this bill clarified in order to avoid uncertainty of administration.

In the absence of expressed policy regarding the use of these benefits and program administration, and with inadequate information available with which to make necessary cost assumptions about program usage under the proposed Armed Forces service option, VA is unable to provide a cost estimate for H. R. 1193 at

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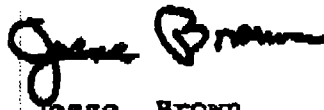
Honorable G. V. (Sonny) Montgomery

this time. We would note that H. R. 1193 could be subject to the pay-as-you-go requirement of the Omnibus Budget Reconciliation Act of 1990.

In conclusion, although VA agrees with the goals of H. R. 1193 and appreciates Congresswoman Kennelly's work on this issue, we cannot support the bill. We respectfully urge the timely passage of the National Service Trust Act of 1993 (H. R. 2010 and S. 919) and the Student Loan Reform Act of 1993 (H. R. 2055 and S. 920). The Administration looks forward to working with you and Congresswoman Kennelly toward achieving this goal.

The Office of Management and Budget advises that there is no objection from the standpoint of the Administration's program to the submission of this report on H. R. 1193 to the Congress.

Sincerely yours,



Jesse Brown

Enclosure

JB/dey

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
Washington, D.C. 20503

To: Liaison

July 2, 1993

LEGISLATIVE REFERRAL MEMORANDUM

LRM #D-297
DRAFT #209

TO: Legislative Liaison Officer -

COMMERCE - Michael A. Levitt - (202)482-3086 - 324
JUSTICE - Shelia F. Anthony - (202)514-2141 - 217
STATE - Julie C. Norton - (202)647-2137 - 225
TRANSPORTATION - Tom Herlihy - (202)366-4687 - 226
EPA - Thomas C. Roberts - (202)260-5414 - 326
NSC - William H. Itoh - (202)395-3723 - 249

FROM: RONALD K. PETERSON (for)
Assistant Director for Legislative Reference

OMB CONTACT: Holly FITTER (395-3233)
Secretary's line (for simple responses): 395-6194
Linda WIESMAN (395-6808)

SUBJECT: *Revised A-Gain* DEFENSE Draft Bill Public Vessel Plastic and
Solid Waste Control Act of 1993 - *version III*

DEADLINE: 10:00 AM July 9, 1993

COMMENTS: If we do not hear from your agency within the
prescribed timeframe we will assume that you have no objection
to clearance.

OMB requests the views of your agency on the above subject before
advising on its relationship to the program of the President, in
accordance with OMB Circular A-19.

Please advise us if this item will affect direct spending or
receipts for purposes of the the "Pay-As-You-Go" provisions of
Title XIII of the Omnibus Budget Reconciliation Act of 1990.

CC:
J. Payne
L. Haber
T. Hunt
K. McGinty

Note: Report will be
hand delivered
to your agency

12 pages

July 1, 1993

CHANGES TO 8TH DRAFT (DATED MAY 1993) OF THE NAVY'S REPORT TO CONGRESS ON PLASTICS

The purpose of these changes is to make the report recommendations and text consistent with the current language of the Navy's proposed legislation with regard to submarines.

- ♦ Submarines are given 15 years to achieve full compliance, rather than a permanent exemption as in previous versions.

SPECIFIC CHANGES

1. Change the date on the cover and every page to "June 1993."

2. **Page v--Executive Summary**--Add the following after the 3rd bullet under "Schedule for Compliance:"

The Navy is committed to achieving maximum submarine compliance with MPPRCA and Annex V by the end of the year 2008. At present, the technology through which such compliance can be achieved has not been developed. Ongoing research and development in shipboard waste processing equipment will focus on submarine and special area discharge requirements.

3. **Page vi--Executive Summary**--Delete "submarines" in sentence 1, delete sentence 2, and replace Recommendations 1-3 with the following:

1. Increase the period for Navy surface ship compliance with MPPRCA by 5 years.
2. Increase the period for Navy submarine compliance with MPPRCA by 15 years.
3. Change MPPRCA requirements to prohibit discharge of plastics and "floating" debris, rather than the current prohibition of all solid wastes discharges (except food wastes beyond 12 nautical miles) in Annex V special areas.

4. **Page vii--Table of Contents**--Delete Sections 5.1 and 5.2.

5. Page 17—Section 3:

Insert "surface ship" before "compliance" in sentence 1, and insert the following after sentence 1:

The Navy is committed to achieving maximum submarine compliance with all provisions of MPPRCA and Annex V in the year 2008.

Insert "in surface ships" after "waste processor" in paragraph 3, last sentence.

6. Page 19—Section 3—Insert the following paragraphs:

Additional time will be required to achieve maximum compliance for submarines. Submarines have extremely limited space in which to install waste processing equipment, or to store waste. Furthermore, the atmosphere in a submarine must be very carefully controlled, since that atmosphere supports the crew for as long as the submarine remains submerged. Waste processing equipment that might affect the atmosphere (such as the plastics processor) and waste management practices that might introduce airborne contamination (such as storage of food waste) are therefore impracticable on submarines. New technology must be developed to accommodate the special requirements of submarines.

In the meantime, submarine crews are already removing unnecessary plastic wrappings from supplies before they are taken on board. The amount of material discharged from submarines is small, since the crew size is relatively small (around 100 persons). Solid waste generated at sea is compacted and placed in sinkable metal containers, which are discharged when the submarine is operating either 25 miles or more from shore, or at least 12 miles from shore and in 6,000 feet of water.

7. Page 27—Section 5:

Paragraph 1: Delete "two categories" and "submarines and surface ships."

Delete "Section 5.1: Submarines," and replace with "Ships Operating in Special Areas," with no section number. (Leave this paragraph as part of Section 5.0.)

8. Page 35—Section 7—Replace Recommendations 1-3 with the following:

1. Increase the period for Navy surface ship compliance with MPPRCA by 5 years.
2. Increase the period for Navy submarine compliance with MPPRCA by 15 years.
3. Change MPPRCA requirements to prohibit discharge of plastics and "floating" debris, rather than the current prohibition of all solid waste discharges (except food waste beyond 12 nautical miles) in Annex V special areas.

The Honorable Albert Gore, Jr.
President of the Senate
Washington, D.C. 20510

Dear Mr. President:

I am submitting the enclosed report "U.S. Navy Compliance with the Marine Plastic Pollution Research and Control of 1987" (MPPRCA) in fulfillment of Section 2201(b) of Public Law 100-220.

The Navy has taken extraordinary measures to comply with the solid and plastic waste provisions of the Act. These actions have reduced our plastic waste discharge at sea by 70 percent. The Navy is giving priority status to the program and is accelerating development, procurement, delivery, and installation of the equipment necessary to achieve compliance. The Navy expects to achieve maximum compliance in 1998.

As described in the accompanying report, the Navy offers the following recommendations to the Congress:

1. Modify MPPRCA to extend MARPOL Annex V compliance date for no plastic discharge by submarines to 31 December 2008.
2. Change MPPRCA requirements for ships to prohibit discharge of all plastic and all "floating" debris, in Annex V special areas rather than the current prohibition of all solid waste discharges (except food waste beyond 12 nautical miles in Annex V special areas).
3. Increase the period for Navy compliance with MPPRCA for surface ships by 5 years and for submarines by 15 years.

I am including proposed legislative changes to implement the above changes to MPPRCA.

Budget and Cost Analysis

The compliance by 1994 is not realistically achievable. Commercially available equipment does not satisfy shipboard requirements, and there is insufficient time available to complete development, contracting, procurement, testing and installation of Navy standard equipment aboard all ships. Without compaction and at-sea disposal equipment on board, the storage of plastic and solid waste quickly becomes an unmanageable option. There is insufficient capacity to store solid waste aboard ships, particularly during prolonged operations at sea. Although some underway

transfer of plastic and solid waste to support ships for off-load and disposal ashore is possible, it is not an operation for which our combatants are suited, nor does it consider the numerous ships that frequently operate independently. Further, sailors would have to perform at-sea transfers of the solid waste which would pose safety, health and logistical problems.

It will cost an average of \$138 million per year between now and the end of FY 1998 to complete development, procurement and installation of the Navy standard shipboard solid waste processing equipment recommended in the report. After installation is completed, there would be minimal subsequent annual operating costs. The Navy has already embarked upon an ambitious program to achieve compliance by that time.

The Navy is committed to installing the shipboard solid waste equipment as quickly as possible. We are prepared to discuss the report and legislative proposals at your convenience.

Sincerely,

Enclosures

- (1) Draft Bill
- (2) Sectional Analysis

The Honorable Thomas S. Foley
Speaker of the House of Representative
Washington, D.C. 20515

Dear Mr. Speaker:

I am submitting the enclosed report "U.S. Navy Compliance with the Marine Plastic Pollution Research and Control of 1987" (MPPRCA) in fulfillment of Section 2201(b) of Public Law 100-220.

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3. Increase the period for Navy compliance with MPPRCA for surface ships by 5 years and for submarines by 15 years.

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Sincerely,

Enclosures

- (1) Draft Bill
- (2) Sectional Analysis

SHIPBOARD PLASTIC AND SOLID WASTE CONTROL ACT OF 1993

Sectional Analysis

Section 1. Names the Act.

Section 2. Amends the Act to Prevent Pollution from Ships to:

a. Defer the requirement to comply with MARPOL Annex V for all Department of the Navy ships, except submarines, until 31 December 1998.

b. Defer the requirement to comply with MARPOL Annex V for Department of the Navy submarines, until 31 December 2008.

Section 3. Amends the Act to Prevent Pollution from Ships to allow certain limited discharges from Department of the Navy ships in MARPOL "special areas" provided that:

a. Discharges must be at least 12 miles from shore;

b. Discharges cannot be plastic or float; and

c. Discharges must be processed through specific waste-processing devices including pulpers, shredders and submarine compactors.

Section 4. Amends the Act to Prevent Pollution from Ships to require continued efforts to eliminate solid waste discharges.

a. The Secretary of the Navy is required to support development of technologies necessary to achieve full compliance at the earliest possible date.

b. The Secretary of the Navy is required to issue regulations to further reduce discharges, including those from submarines and those occurring in special areas, so far as is reasonable and practicable without impairing operational effectiveness.

c. The Secretary of Defense annually will report to concerned agencies the amount and nature of discharges that otherwise would be unauthorized under the MARPOL Annex V.

d. The Secretary of Defense is required to assess available technologies and report progress of the Navy, including amounts budgeted, in achieving compliance.

Section 5. Requires the Department of the Navy to meet certain performance standards by completing research and development, acquisition and installation of plastics processors to meet the December 31, 1998 deadline.

A BILL

Shipboard Plastic and Solid Waste Control Act of 1993

To amend the Act to Prevent Pollution from Ships in order to establish standards for compliance with Annex V to the MARPOL Convention by ships owned or operated by the Department of the Navy, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States in Congress assembled,

Section 1. Title. This act may be cited as the Shipboard Plastic and Solid Waste Control Act of 1993.

Section 2. Compliance Deadlines for Department of the Navy Ships.

(a) Subsection 3(b)(2)(A) of the Act to Prevent Pollution from Ships [33 U.S.C. § 1902(b)(2)(A)] is amended by deleting all after the words "shall apply" and inserting the following:

"to ships referred to in paragraph (1)(A) as follows:

(i) After December 31st, 1993 to all such ships except those owned or operated by the Department of the Navy;

(ii) After December 31st, 1998 to all such ships, including those owned or operated by the Department of the Navy except submersibles;

(iii) After December 31st, 2008 to all such ships, including those owned by the Department of the Navy and submersibles."

Section 3. Special Area Discharges. Section 3 of the Act to Prevent Pollution from Ships [33 U.S.C. § 1902] is amended by renumbering existing subsections (c) and (d) as (d) and (e) respectively and inserting new subsection (c) after subsection (b), as follows:

"(c) Special Area Discharges.

(1) This chapter shall not apply to effluent or other discharges from pulpers, comminuters, shredders, compactors aboard submersibles, processors or other waste

Shipboard Plastic and Solid Waste Control Act of 1993

processing devices from any ship described in subsection (b)(1) while such ship is located in a special area in effect under the Convention unless:

- (A) The ship is located within twelve nautical miles of the nearest land;
- (B) such effluent or discharges result in the release of floatable material upon the surface of the water; or
- (C) such effluent or discharges result in the release of plastic, irrespective of whether it floats."

Section 4. Full compliance measures. Renumbered subsection 3(e) of the Act to Prevent Pollution from Ships [33 U.S.C. 1902(e)] is amended as follows:

"(e) Compliance by Excluded Vessels. The United States hereby establishes a goal of full compliance with the requirements of Annex V to the MARPOL Protocol. To this end:

(1) The Secretary of the Navy shall develop, and, as appropriate, support the development of the practicable technologies for solid waste management aboard ships, including technologies and practices for reduction of the waste stream, necessary to achieve the goal of full compliance established by this subsection at the earliest possible date.

(2) Within twelve months of the effective date of this section, the Secretary of the Navy shall prescribe standards applicable to ships excluded from this chapter by subsection (b)(1) of this section for which he is responsible. Standards prescribed under this subsection shall ensure, so far as is reasonable and practicable without impairing their operations or operational capabilities, that such ships, including submersibles and ships in special areas, act in a manner consistent with the requirements of the MARPOL Protocol. The Secretary of the Navy shall revise such standards from time to time in accordance with this subsection unless and until full compliance with the requirements of MARPOL Annex V is achieved.

(3) The Secretary of Defense annually shall report to the heads of concerned Federal agencies regarding the amount and nature of discharges from submersibles described in subsection (b)(1) and discharges from ships pursuant to subsection (c)(1), which discharges would not otherwise be authorized under Annex V to the Convention.

Shipboard Plastic and Solid Waste Control Act of 1993

1 (4) Five years from the effective date of this section, and on each five year
2 anniversary thereafter until full compliance with Annex V to the Convention is achieved by
3 all ships under their control, the Secretary of Defense shall submit to the heads of concerned
4 agencies a report:

5 (A) Reviewing the then-existing technologies for solid waste management
6 aboard ships, including submersibles;

7 (B) assessing the practicability of employing such technologies in Department
8 of the Navy ships to achieve full compliance with the requirements of Annex V to the
9 Convention by submersibles and by Department of the Navy ships in special areas; and

10 (C) setting forth the progress of the Department of the Navy, including
11 amounts budgeted, towards achieving full compliance by submersibles and by Navy ships in
12 special areas no later than 15 years from the effective date of this section."

1 **Section 5. Progress standards.** The Department of the Navy shall vigorously pursue
2 research and development, acquisition and installation of equipment required to meet the
3 compliance deadlines established by Section 2 of this Act.

4 (a) To ensure timely compliance, the Department of the Navy shall meet the
5 following objective standards:

6 (1) Not later than October 1, 1994, the Department of the Navy shall release a
7 request for proposals for equipment required to allow long term collection and storage of
8 plastic waste aboard its ships (hereinafter, "plastics processor"); and

9 (2) Not later than July 1, 1996, the Department of the Navy shall install the
10 first production unit of the plastics processor on board a Navy ship; and

Shipboard Plastic and Solid Waste Control Act of 1993

1 (3) Not later than July 1, 1997, the Department of the Navy shall complete
2 installation of plastics processors on board at least half the ships that require such processors
3 to comply with Section 2(a)(ii) of this Act; and

4 (4) Not later than April 1, 1998, the Department of the Navy shall complete
5 installation of plastics processors on board at least three quarters of the ships that require such
6 processors to comply with Section 2(a)(ii) of this Act.

7 (b) The dates set forth in subsection (a) shall be extended day for day only to the
8 extent that they cannot be met due to operational commitments ordered by the National
9 Command Authority, failure of the Department of Defense or Congress to provide the funds
10 requested by the Navy for this program, delays resulting from administrative boards or
11 judicial proceedings, or delays caused by failure of a contractor to meet its obligations under
12 the contract, Acts of God, or other circumstances not reasonably within the control of the
13 Department of the Navy.

Codified Section 1902, As Amended

§ 1902. Ships subject to preventive measures

(a) Included vessels

This chapter shall apply—

(1) to a ship of United States registry or nationality, or one operated under the authority of the United States, wherever located;

(2) with respect to Annexes I and II to the Convention, to a ship, other than a ship referred to in paragraph (1), while in the navigable waters of the United States;

(3) with respect to the requirements of Annex V to the Convention, to a ship, other than a ship referred to in paragraph (1), while in the navigable waters or the exclusive economic zone of the United States; and

(4) with respect to regulations prescribed under section 1905 of this title, of any port or terminal in the United States.

(b) Excluded vessels

(1) Except as provided in paragraph (2), this chapter shall not apply to—

(A) a warship, naval auxiliary, or other ship owned or operated by the United States when engaged in noncommercial service; or

(B) any other ship specifically excluded by the MARPOL Protocol.

(2)(A) Notwithstanding any provision of the MARPOL Protocol, and subject to subparagraph (B) of this paragraph, the requirements of Annex V to the Convention shall apply to ships referred to in paragraph (1)(A) as follows:

(i) After December 31st, 1993 to all such ships except those owned or operated by the Department of the Navy;

(ii) After December 31st, 1998 to all such ships, including those owned or operated by the Department of the Navy except submersibles;

(iii) After December 31st, 2008 to all such ships, including those owned by the Department of the Navy and submersibles.

Codified Section 1902, As Amended

(B) This paragraph shall not apply during time of war or a declared national emergency.

(c) Special Area Discharges.

(1) This chapter shall not apply to effluent or other discharges from pulpers, comminuters, shredders, compactors aboard submersibles, processors or other waste processing devices from a ship described in subsection (b)(1) while such ship is located in a special area in effect under the Convention unless:

(A) The ship is located within twelve nautical miles of the nearest land;

(B) such effluent or discharges result in the release of floatable material upon the surface of the water; or

(C) such effluent or discharges result in the release of plastic, irrespective of whether it floats.

(d) Regulations

The Secretary shall prescribe regulations applicable to ships of a country not a party to the MARPOL Protocol, including regulations conforming to and giving effect to the requirements of Annex V as they apply under subsection (a) of this section, to ensure that their treatment is not more favorable than that accorded ships to parties to the MARPOL Protocol.

(e) Compliance by Excluded Vessels

The United States hereby establishes a goal of full compliance with the requirements of Annex V to the MARPOL Protocol. To this end:

(1) The Secretary of the Navy shall develop, and, as appropriate, support the development of the practicable technologies for solid waste management aboard ships, including technologies and practices for reduction of the waste stream, necessary to achieve the goal of full compliance established by this subsection at the earliest possible date.

(2) Within twelve months of the effective date of this section, the Secretary of the Navy shall prescribe standards applicable to ships excluded from this chapter by subsection (b)(1) of this section for which he is responsible. Standards prescribed under this subsection

Codified Section 1902, As Amended

1 shall ensure, so far as is reasonable and practicable without impairing their operations or
2 operational capabilities , that such ships, including submersibles and ships in special areas, act
3 in a manner consistent with the requirements of the MARPOL Protocol. The Secretary of the
4 Navy shall revise such standards from time to time in accordance with this subsection unless
5 and until full compliance with the requirements of MARPOL Annex V is achieved.

6 (3) The Secretary of Defense annually shall report to the heads of concerned Federal
7 agencies regarding the amount and nature of discharges from submersibles described in
8 subsection (b)(1) and discharges from ships pursuant to subsection (c)(1), which discharges
9 would not otherwise be authorized under Annex V to the Convention.

10 (4) Five years from the effective date of this section, and on each five year
11 anniversary thereafter until full compliance with Annex V to the Convention is achieved by
12 all ships under their control, the Secretary of Defense shall submit to the heads of concerned
13 agencies a report:

14 (A) Reviewing the then-existing technologies for solid waste management
15 aboard ships, including submersibles;

16 (B) assessing the practicability of employing such technologies in Department
17 of the Navy ships to achieve full compliance with the requirements of Annex V to the
18 Convention by submersibles and by Department of the Navy ships in special areas; and

19 (C) setting forth the progress of the Department of the Navy, including
20 amounts budgeted, towards achieving full compliance by submersibles and by Navy ships in
21 special areas no later than 15 years from the effective date of this section.



Report to Congress

U.S. Navy
Compliance with the
Marine Plastic Pollution
Research and Control Act
of 1987

June 1993

Preface

The Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA) implements Annex V of the International Convention for the Prevention of Pollution by Ships (MARPOL) as U.S. law. The effective date of the Act for the maritime industry was December 31, 1988, the day Annex V entered into force for the United States.

Annex V of MARPOL prohibits (subject to limited exceptions) the disposal from ships into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets, and plastic garbage bags. Annex V also restricts the discharge at sea of other types of garbage to specified distances from the nearest land. Public vessels are exempt from the restrictions but are expected to comply to the extent possible.

Unlike Annex V of MARPOL, the MPPRCA does not exempt public vessels and requires the U.S. Navy, beginning 5 years after Annex V enters into force (i.e., December 31, 1993) to comply with the discharge controls. However, under provisions of MPPRCA, the Congress may modify this applicability to the Navy, based on this mandated Report to the Congress on the Navy's extent of compliance.

This report reviews Navy actions being taken in response to MPPRCA, the schedule for achieving maximum compliance, impediments to full compliance by December 31, 1993, ships that cannot achieve full compliance and recommended measures that will allow for Navy compliance with MPPRCA.

Executive Summary

Navy Actions in Response to MPPRCA

For a number of years, the Navy was developing shipboard solid waste management equipment, in anticipation of Annex V regulations affecting ocean dumping of trash and garbage. However, the MPPRCA requirement prohibiting the Navy from discharging plastic at sea caught the Navy somewhat by surprise because maritime regulations have always recognized the unique operating constraints of the military and have allowed the Navy to comply only to "the extent practicable." Nevertheless, the Navy responded to MPPRCA by accelerating its planned Shipboard Solid Waste Management Program and modifying the program strategy to address the unanticipated plastics discharge prohibition.

From the highest levels in the Navy down to the deckplate sailor, the Navy took unprecedented measures to immediately reduce and eventually eliminate plastics waste discharges from its ships. The Navy prepared comprehensive program plans prior to passage of MPPRCA and issued new guidance and instructions on plastics waste management in 1989.

Navy sailors are now separating the plastic from the nonplastics waste at sea and storing plastics waste on board to the extent practical without impairing the operation of our ships. The waste is then off-loaded in port for recycling or proper disposal. The Navy is reducing the amount of plastics taken aboard and developing new equipment for ships to manage what plastics are taken on board.

Navy Program Strategy and Approach

The Navy will comply with and exceed the requirements of Annex V and MPPRCA, subject to the recommended changes, by changing shipboard waste management and supply practices and installing new shipboard solid and plastics waste management equipment.

Prior to passage of MPPRCA, the Navy's strategy for shipboard solid waste management was to direct ships to discharge solid waste only where permitted, and to provide ships with equipment to grind up pulpable waste and compact unpulpable trash into sinkable slugs for overboard discharge where permitted. As early as 1970, the Navy imposed requirements for shipboard solid waste disposal that matched

EXECUTIVE SUMMARY

or exceeded those specified in Annex V (except for plastics). Under the original long-term strategy, plastics waste was to have been compacted along with other unpulpable trash and discharged as sinkable slugs. However, the new restrictions on plastics waste discharge caused the Navy to substantially modify its solid waste management practices and long-term strategy.

Under the revised Navy strategy, the approach to compliance with the nonplastics requirements of Annex V remains the same, except that unpulpable trash will be shredded rather than compacted. For the specific problem of shipboard plastics waste management, the Navy's compliance strategy includes five additional elements:

- Source Reduction (i.e., fewer plastics in the supply system);
- Source Separation (i.e., on-board separation of plastics and nonplastics waste);
- On-Board Storage of Plastics Waste;
- Education of Ships' Officers and Crews; and
- On-Board Plastics Waste Processing Equipment.

Navy compliance with plastics provisions of Annex V will be achieved in two stages: near-term operational and supply system changes to reduce plastics discharges; and longer-term equipment installations to eliminate plastics discharges. The first stage includes the source reduction, source separation, on-board storage, and educational efforts. This stage has been largely completed by implementing new Navy instructions to all ships. Changes in the Navy's supply system to reduce the amount of plastics taken aboard ships have already begun and will continue until all reasonable measures have been taken.

The second stage in the revised compliance strategy is the installation of shipboard metal/glass shredders, solid waste pulpers, and plastics waste processors. This will enable Navy ships to fully comply with

EXECUTIVE SUMMARY

Schedule for Compliance

the plastics waste provisions and exceed the nonplastics waste provisions of Annex V.

The Navy expects to achieve maximum surface ship compliance with MPPRCA and Annex V in 1998. The Navy has given priority status to the program and is working to accelerate development, procurement, delivery, and installation of solid waste processing equipment. Actions are under way to complete or have in progress installations of the Navy's metal/glass shredder, solid waste pulper, and plastics waste processor by the end of 1998. These actions include:

- Accelerating procurement and delivery of shipboard equipment;
- Accelerating development and testing of plastics waste processors; and
- Assigning priority status to equipment installations at the earliest opportunities.

The Navy is committed to achieving maximum submarine compliance with MPPRCA and Annex V by the end of the year 2008. At present, the technology through which such compliance can be achieved has not been developed. Ongoing research and development in shipboard waste processing equipment will focus on submarine and special area discharge requirements.

Impediments to Full Compliance By 1994

The Navy cannot fully comply with zero-plastics discharge requirement of MPPRCA and Annex V by December 31, 1993 because: 1) the shipboard solid and plastics waste management equipment cannot be developed and installed on all ships by that date; 2) food-contaminated plastics waste cannot be stored on board for more than 3 days without unacceptable odors and potential fire, health, and sanitation risks; and 3) suitable nonplastic substitutes for all plastic items, packing, and packaging taken aboard are not available.

EXECUTIVE SUMMARY

Navy Ships that Cannot Achieve Full Compliance

At this time, the Navy cannot foresee any technological breakthrough that would allow ships operating in special areas to fully comply with MPPRCA and Annex V requirements. Ships operating in special areas will be able to comply with the plastics waste restrictions but not fully comply with the restrictions on the discharge of nonplastics solid waste.

Recommendations

1. Increase the period for Navy surface ship compliance with MPPRCA by 5 years.
2. Increase the period for Navy submarine compliance with MPPRCA by 15 years.
3. Change MPPRCA requirements to prohibit discharge of plastics and "floating" debris, rather than the current prohibition of all solid wastes discharges (except food wastes beyond 12 nautical miles) in Annex V special areas.

The Navy supports a national goal of full compliance with Annex V requirements and is working hard to achieve that goal. Beyond Annex V, the Navy has established an objective of achieving environmentally sound ships of the 21st century. The Navy now is taking all reasonable measures to minimize discharges in special areas and from submarines, and will continue searching for suitable technologies that will treat or destroy all wastes on board. The Navy will report annually to concerned Federal agencies on the discharges not authorized under Annex V from submarines and from ships operating in special areas. The Navy will also submit every 5 years to concerned Federal agencies a report reviewing the latest technologies for solid waste management aboard ships, including submarines, and the suitability of the technologies for Navy ships and submarines.

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1.

Introduction

1.1

Purpose of Report

This Navy report fulfills a requirement of the Marine Plastic Pollution Research and Control Act of 1987 (P.L. 100-220) that each Federal agency operating ships that may not be able to comply with the requirements of the Act shall report to Congress. The Act directs each agency to report the following:

- 1) The technical and operational impediments to achieving that compliance;
- 2) An alternative schedule for achieving that compliance as rapidly as is technologically feasible;
- 3) The ships operated or contracted for operation by the agency for which full compliance with section 3(b)(2)(A) (~~by~~ January 1, 1994) is not technologically feasible; and
- 4) Any other information that the agency head considers relevant and appropriate.

1.2

Marine Plastic Pollution Research and Control Act of 1987

The Marine Plastic Pollution Research and Control Act of 1987 (MPPRCA), signed by the President on December 29, 1987, implements Annex V of the International Convention for the Prevention of Pollution by Ships (MARPOL) as U.S. law, and mandates certain studies of plastics pollution and compliance reports by Federal agencies. The effective date of the Act for the maritime industry was December 31, 1988, the day Annex V entered into force for the United States.

1.3

Annex V of MARPOL

Annex V of MARPOL prohibits (subject to limited exceptions) the disposal from ships into the sea of all plastics, including but not limited to synthetic ropes, synthetic fishing nets, and plastic garbage bags. It also restricts the discharge at sea of other types of garbage to specified distances from the nearest land. Public vessels are exempt from the restrictions but are expected to comply to the extent possible. The basic requirements of Annex V are the following:

INTRODUCTION

- Disposal of all plastics into the sea is prohibited;
- Disposal of dunnage, lining, and packing material that will float is prohibited within 25 nautical miles (nm) of the nearest land;
- Disposal of food waste and other garbage is prohibited within 12 nm of the nearest land, unless the waste is comminuted and able to pass through 1-inch screens -- in which case, disposal is permitted beyond 3 nm from the nearest land.
- Disposal of all garbage (except food waste beyond 12 nm) is prohibited in the Baltic Sea and other special areas.

1.4 Specific Provisions for Navy Vessels

Unlike Annex V of MARPOL, the MPPRCA does not exempt public vessels and requires the U.S. Navy, beginning 5 years after Annex V enters into force (i.e., January 1, 1994) to comply with the discharge controls. However, under MPPRCA provisions, the Congress may modify this applicability to the Navy, based on this mandated Report to the Congress on the Navy's extent of compliance.

2.

Navy Actions in Response to MPPRCA

For a number of years, the Navy was developing shipboard solid waste management equipment, in anticipation of Annex V regulations affecting ocean dumping of trash and garbage. However, the MPPRCA requirement prohibiting the Navy from discharging plastic at sea caught the Navy somewhat by surprise because maritime regulations have always recognized the unique operating constraints of the military and have allowed the Navy to comply only to "the extent practicable." Nevertheless, the Navy responded to MPPRCA by accelerating its planned Shipboard Solid Waste Management Program and modifying the program strategy to address the unanticipated plastics discharge prohibition.

From the highest levels in the Navy down to the deckplate sailor, the Navy took unprecedented measures to immediately reduce and eventually eliminate plastics waste discharges from its ships. The Navy prepared comprehensive program plans prior to passage of MPPRCA and issued new guidance and instructions on plastics waste management in 1989.

Navy sailors are now separating the plastics from the nonplastics waste at sea and storing plastics waste on board until it is off-loaded in port for recycling or proper disposal. The Navy is reducing the amount of plastics taken on board and developing new equipment for ships to manage what plastics are taken aboard.

2.1 Immediate High- Level Attention

Prior to passage of MPPRCA, the Assistant Secretary of the Navy for Shipbuilding and Logistics, in October 1987, directed the Naval Sea Systems Command (NAVSEA) and the Naval Supply System Command (NAVSUP) to prepare comprehensive plans of action to control plastics waste discharge at sea. NAVSUP's plan addresses the expeditious reduction of the plastic material aboard ships, with emphasis on initiatives having tangible results by December 31, 1993. NAVSEA's plan addresses the expeditious development and installation of solid waste handling and destruction devices suitable for plastic disposition in a shipboard environment. Although the MPPRCA gives the Navy 5 years to comply with the plastic discharge ban, the Navy has already taken significant steps to reduce the

amount taken aboard ships and discharged at sea. In November 1988, the Secretary of the Navy asked all Navy commands to take the extra effort necessary to ensure the Navy does its part in promoting a clean and safe environment. Fleet Commanders responded by instructing their ships to separate and store plastics waste on board. In March 1989, all U.S. Navy ships began retaining all plastics waste on board for shore disposal, if they are at sea for less than 3 days. If ships are at sea for longer than 3 days, they must retain food-contaminated plastics waste for the last 3 days at sea, and nonfood-contaminated waste for at least 20 days.

To help sailors understand the reasons for, and comply with the plastics waste discharge ban, the Office of the Chief of Naval Operations sent an educational package to each ship. The package contained guidelines, posters, brochures, and videotapes about plastics waste, the Navy's program, and the new requirements.

2.2 Navy's Solid and Plastics Waste Program

Although Annex V of MARPOL exempts military vessels, the U.S. Navy began a long-term program in the 1980s to develop shipboard equipment to manage solid waste and comply with the ocean dumping restrictions on trash and garbage. Historically, the Navy has led the maritime industry in addressing the problem of shipboard solid waste management, primarily because our equipment requirements for size, weight, safety, reliability, and maintenance generally preclude using commercially available waste management equipment.

2.2.1 Program Goal and Objectives

The goal of the Navy's Shipboard Solid and Plastics Waste Program is to enable Navy ships to comply fully with and eventually exceed the requirements of international and Federal regulations that control the disposal of plastics and solid waste at sea.

The near-term objective is to maintain full compliance with the nonplastics solid waste requirements of Annex V and to reduce plastics waste discharges significantly from Navy ships by 1994 (i.e.,

2.2.2 Navy Program Strategy and Approach

the effective date of MPPRCA for Navy ships).

The longer-term objective is to fully comply with the plastics and nonplastics discharge restrictions of Annex V by the end of 1998, and to exceed the requirements by eliminating the discharge of floatable marine debris from Navy ships.

The Navy will comply with Annex V and MPPRCA, subject to the recommended changes, by changing shipboard waste management and supply practices and installing new shipboard solid and plastics waste management equipment on all ships.

Prior to passage of MPPRCA, the Navy's strategy for shipboard solid waste management was to direct ships to discharge solid waste only where permitted, and to provide ships with equipment to grind up pulpable waste and compact unpulpable trash into sinkable slugs for overboard discharge where permitted. As early as 1970, the Navy imposed requirements for shipboard solid waste disposal that were more stringent than those specified in Annex V. Under the original long-term strategy, plastics waste was to have been compacted along with other unpulpable trash and discharged as sinkable slugs. However, the new restrictions on plastics waste discharge caused the Navy to substantially modify its solid waste management practices and long-term strategy.

Under the revised Navy strategy, the approach to compliance with the nonplastics requirements of Annex V remains essentially the same, except that unpulpable trash will be shredded rather than compacted. For the specific problem of shipboard plastics waste management, the Navy's compliance strategy includes five additional elements:

NAVY ACTIONS IN RESPONSE TO MPPRCA

- Source Reduction (i.e., fewer plastics in the supply system);
- Source Separation (i.e., on-board separation of plastics and nonplastics waste);
- On-Board Storage of Plastics Waste;
- Education of Ships' Officers and Crews; and
- On-Board Plastics Waste Processing Equipment.

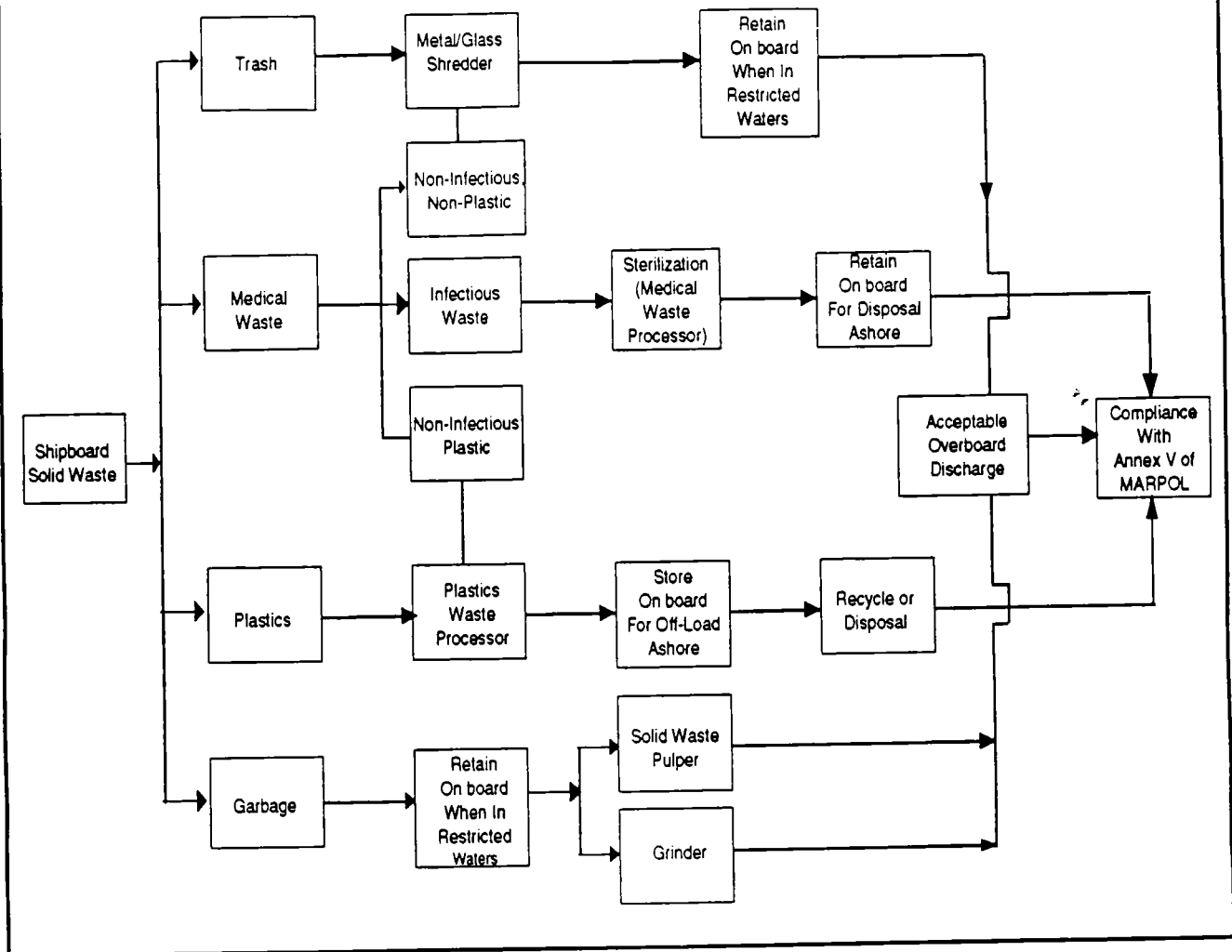
Navy compliance with plastics provisions of Annex V will be achieved in two stages: near-term operational and supply system changes to reduce plastics discharges; and longer-term equipment installations to eliminate plastics discharges. The first stage includes source reduction, source separation, on-board storage, and educational efforts. This stage has been largely completed by implementing new Navy instructions to all ships. Changes in the Navy's supply system to reduce the amount of plastics taken aboard ships have already begun and will continue until all reasonable measures have been taken.

The second stage in the revised compliance strategy includes the installation of shipboard metal/glass shredders, solid waste pulpers, and plastics waste processors. This will enable Navy ships to fully comply with the plastics waste provisions and exceed the nonplastics waste provisions of Annex V. Figure 1 illustrates the Navy's planned shipboard approach for managing solid and plastics waste.

NAVY ACTIONS IN RESPONSE TO MPPRCA

Figure 1

U.S. Navy's Shipboard Solid Waste Management Strategy



2.2.3 Navy Requirements

Following the Fleet Commanders' instructions in March 1989 for ships crews to separate and store plastics waste on board, the Chief of Naval Operations institutionalized the new procedures for shipboard solid and plastics waste management in a major revision to the Navy's *Environmental Protection and Natural Resources Manual* (OPNAVINST 5090.1A). The manual requires the following shipboard procedures for managing solid waste.

Trash (Nonplastic)

- (1) Plastic trash can liners shall not be used where the trash will be discharged overboard.
- (2) Unpulped trash shall not be discharged at sea within 25 nm from the U.S. coastline.
- (3) Pulped trash shall not be discharged at sea within 3 nm from any U.S. coastline.
- (4) Surface ships equipped with incinerators and/or compactors shall use such equipment to the maximum extent possible with the objective of minimizing trash volume. Every reasonable effort shall be made to package all trash for negative buoyancy prior to overboard discharge. Compacted trash shall not be discharged at sea within 25 nm of the U.S. coastline. No trash, whether treated or untreated, shall be discharged within 25 nm of any foreign coastline. For submarines only, compacted trash that is negatively buoyant may be discharged within 25 nm of the U.S. coastline, but not less than 12 nm from the U.S. coastline, provided that the depth of the water is greater than 1,000 fathoms.

Plastics

- (1) Replace plastic disposable items with nonplastic items where possible. If appropriate, remove plastic wrapping and shipping materials from supply items before bringing them on board. Minimize the amount of plastic supplies consumed.
- (2) Nonfood-contaminated plastics: Segregate plastics waste and use plastic bag liners for containment. If dedicated space is not available, store on station or in division spaces. When at sea, storage space restrictions may occur. Therefore, retain nonfood-contaminated plastics on board for a goal of 20 days or longer as storage space permits. If at sea for longer than 20 days and storage space is not available, plastics waste generated after the first 20 days may be disposed of beyond

NAVY ACTIONS IN RESPONSE TO MPPRCA

50 nm from the nearest shoreline by properly packaging the waste for negative buoyancy.

- (3) Food-contaminated plastics: When at sea for 4 or more continuous days, as a goal, retain food-contaminated plastics on board for the last 3 days before return to port to prevent odor and sanitation problems.
- (4) In the event that any on-board retention of plastics waste endangers the health or safety of crew members, creates an unacceptable nuisance condition, or compromises combat readiness, overboard discharge is permitted beyond 50 nm from the nearest shoreline, provided that the waste has been properly packaged and weighted for negative buoyancy.
- (5) All at-sea disposal of plastics shall be approved by the commanding officer and appropriately logged to indicate the amount, time, and location of the overboard discharge. Commands shall report discharges of plastics at sea when not in compliance with the paragraph above, according to requirements established by type commanders, immediate operational commanders, or fleet commanders.
- (6) Submarines shall make a conscientious effort to minimize the discharge of plastics at sea following the guidance above.

Garbage

- (1) Unpulped garbage shall not be discharged within 12 nm of any U.S. coastline.
- (2) Pulped garbage shall be discharged as far from any U.S. coastline as practicable, but not within 3 nm of any U.S. coastline. Pulped garbage may be discharged into shipboard sewage holding tanks only when a ship is docked and the sewage tanks are discharging to pier facilities. Garbage pulpers shall not be used within 3 nm of any U.S. coastline in order to maximize necessary sewage holding capacity and to preclude inadvertent overboard discharges of sewage.

- (3) No garbage, whether pulped or unpulped, shall be discharged within 12 nm of any foreign coastline.

Solid Waste in Port

While in port, and prior to getting underway, Navy vessels shall off-load all solid waste to shoreside facilities.

2.2.4 Ship Demonstration Project

Before commanders could require ships to make drastic changes in shipboard solid waste management practices to reduce plastics waste discharges, the Navy had to learn what practices would be effective, feasible, and safe. The Navy needed to learn (1) the nature and quantities of plastics waste on Navy ships, (2) feasible shipboard plastics waste management practices, and (3) sailors' attitudes about plastics pollution control. In 1988, the Navy initiated the Shipboard Plastics Waste Reduction Demonstration Project to collect this information.

During the Demonstration Project, Navy researchers traveled on seven ships to quantify shipboard plastics waste, and evaluated prototype equipment and plastics waste management procedures. They sorted and inventoried all plastics waste generated on board. On two ships, they evaluated Navy-developed prototypes of a trash compactor and a waste pulper. The researchers also surveyed the sailors' knowledge about the plastics problem.

The Demonstration Project found that solid and plastics waste generation on Navy ships is similar to municipal solid waste generation in the United States. Plastics waste generation rate on Navy ships is between 0.1 and 0.2 pounds per person per day and only 7 percent (by weight) of all solid waste generated on board. Most of the plastics waste (55 percent) comes from food service activities and therefore is contaminated with food waste. The food-contaminated waste (even when stored in plastic garbage bags) developed odor and sanitation problems after 3 days' storage. The other plastics waste that was generated in work and berthing areas throughout the ship was relatively clean and could be separated and stored at the source

2.2.5 Fleet Operations

As soon as results of the Demonstration Project were available, the fleets took actions to control the Navy's plastics waste discharge at sea. In March 1989, Fleet Commanders instructed ships to minimize plastics waste dumping at sea by making operational changes in the way nonplastics solid and plastics waste is managed on board. Specifically, all surface ships were instructed to follow the 3-day/20-day procedures that were later promulgated in OPNAVINST 5090.1A. An evaluation of ship operating schedules in 1988 indicated that implementation of the 3-day/20-day policy would immediately reduce Navywide plastics waste discharge at sea by 70 percent.

2.2.6 Crew Education

In conjunction with the new policy of separating and storing plastics waste on board, the Navy developed and sent to all ships an educational package to help ships understand the reasons for the new requirements and comply with them. The education strategy focused on motivating the entire chain of command, ships' officers, and ships' crews, by providing justification for and useful information about the new requirements.

The Navy's plastics education package includes guidance material, videotapes, posters, and general literature. A Ships' Guide contains information on the problems caused by plastics in the oceans, pertinent Navy requirements, essential elements of a successful shipboard program, example approaches used on the demonstration ships, and general information about related issues. The guide also includes lists of common plastic and substitute nonplastic items, sample ship instructions to implement the program, and Navy points of contact for further information. To educate and motivate the crew members, the Navy made a 10-minute videotape about plastics waste, the Navy's program, and appropriate shipboard actions. To show support for the program from the top levels of the Navy, the Vice Chief of Naval Operations made a statement on the videotape.

The first educational package sent to all ships was so well received by officers and enlisted personnel that, in 1991, the Navy sent all ships an updated package with a revised Ships' Guide, new posters, and a new videotape.

2.2.7 Supply System

The Navy initiated a comprehensive program to reduce the volume of plastics material going aboard Navy ships, to the extent practicable. The program addresses the three ways plastics materials are taken on board ships: plastic items, plastic packaging, and plastic packing material. The focus is on providing the fleet with substitute nonplastics items and packing/ packaging material where acceptable alternatives exist or can be developed. Supply system personnel have identified plastic items in ships' trash streams and are now searching for potential nonplastic substitutes. The initial effort focused on the plastic items most amenable to immediate replacement. The long-term effort addresses plastic items needing technology development before nonplastic substitutes would be acceptable.

In many cases, identifying potential substitutes is not a simple matter. The substitute must be commercially available at a reasonable cost, must have minimal impact on ship operations in terms of weight and storage space requirements, and must still meet performance standards. As an example, no material except plastic currently provides an adequate barrier for items requiring moisture or electrostatic discharge protection.

After acceptable substitutes are identified or developed, the proper changes in the supply system specifications must be made. Some changes can be made by the Navy alone. Others require the consent of and coordination with non-Navy organizations, such as the Defense Logistics Agency (DLA) and the General Services Administration (GSA). The Navy is working closely with those agencies and industrial organizations to make changes where possible. The Navy has found that it can only exert limited influence over industry where plastic is the material of choice. For this reason, a joint working group with representatives from Army, Air Force, DLA, and GSA has been formed to coordinate efforts with the other military services and present a united position to industry. The initial focus of the joint committee is on reducing plastic packaging in Navy-used items managed by the other services.

The DLA has directed its field activities to reduce plastics in the packaging of Navy-used items. The DLA expects to review the packaging of 635,000 active Navy-used items by mid-1996.



Source Reduction Initiatives

Internally, the Navy is making significant progress in changing packaging requirements. Since the program was initiated, changes have been made to reduce or eliminate plastics packaging for over 350,000 Navy-managed items, by eliminating unnecessary plastics, using alternate materials when practicable, and packaging more in bulk. Based on annual demand projections for the items reviewed to date, an estimated 475,000 pounds of plastic will be eliminated as a direct result of these changes.

Examples of other supply initiatives include:

- Naval Supply Centers are reducing the amount of plastic packing and packaging materials they are using by substituting fiberboard boxes, paper cushioning and dunnage materials, paper bags and envelopes, rope and metal strapping, and by maximum use of reusable containers.
- Navy Clothing and Textile Research Facility will revise specifications affecting 500 items to substitute plastic bags with paper bands, tissue/kraft paper sleeves, or eliminate bags totally.
- Navy Publications and Printing Service will specify non-plastic packaging in all new contracts and Navy Publications and Forms Center is experimenting with cold-seal paper packaging.

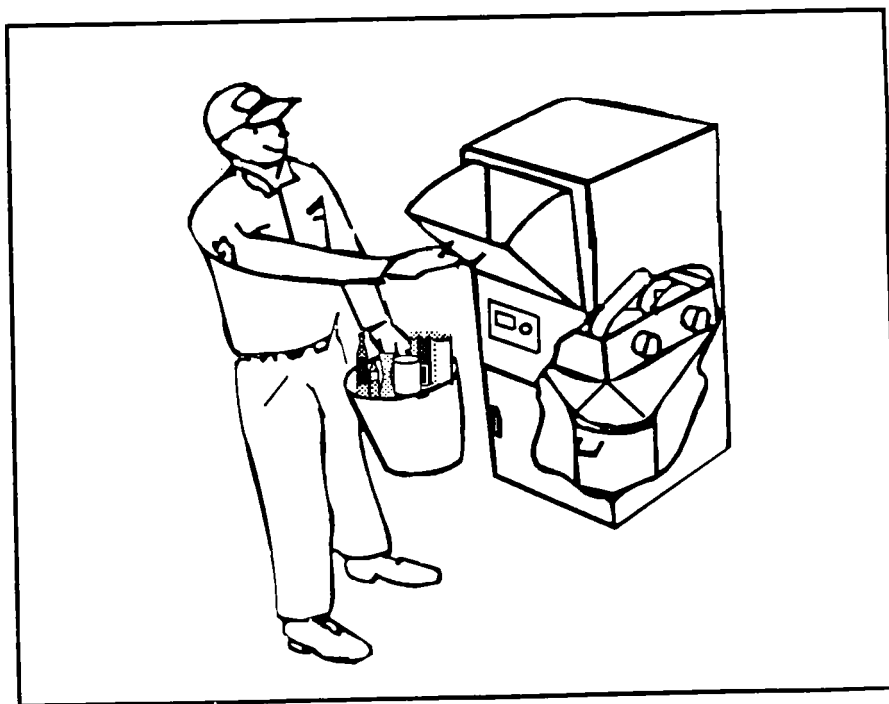
2.2.8 Shipboard Equipment Development

Prior to passage of MPPRCA, the Navy had been researching, developing, testing, and evaluating technologies that could improve shipboard solid waste management. The Navy currently has three pieces of equipment at various stages of development: solid waste pulper, metal/glass shredder, and plastics waste processor.

2.2.8.1 Solid Waste Pulper

The Navy is developing a more powerful version of a commercial food waste pulper for processing routine shipboard solid wastes. The pulper will reduce labor hours devoted to solid waste management because it will process a major portion (60 to 70 percent) of a ship's solid waste stream (including classified documents) and eliminate many trash-hauling trips to the fantail. The pulper pulverizes mulchable materials, such as paper and soft galley wastes, for direct overboard disposal when the ship is beyond 3 nm from shore. The pulper cannot process metal, wood, glass, or plastics.

A commercial version of this pulper was tested during ship demonstration project on the *USS Emory S. Land* (AS-39) and the *USS Lexington* (AVT-16). A pulper compatible with stringent requirements suitable for Navy shipboard application is under development. The Navy's production version of the pulper under development will be installed in operating Navy ships by the end of 1998.



Metal/Glass Shredder

2.2.8.2 Metal/Glass Shredder

The Navy is developing a metal/glass shredder specifically designed for Navy ships. The shredder will ease handling of routine trash and help ships comply with the Navy's requirement to weight discharged trash for negative buoyancy. It will be used to shred all metal, glass, and ceramic waste into a sinkable form to be packed into a paper or cotton bag and discharged overboard where permitted. The production version of the metal/glass shredder will be installed in operating Navy ships by the end of 1998.

2.2.8.3 Plastics Waste Processor

The Navy is evaluating innovative approaches for processing shipboard plastics waste through a multi-phased research and development program. The primary objective is to densify plastics waste and make it safe for long-term storage on board.

In 1991, the Navy designed, fabricated, and laboratory tested two breadboard-level prototypes. In 1992, full-scale development models of the two concepts were designed and fabricated. The production version of the plastics waste processor will be installed in operating Navy ships by the end of 1998.

2.3 Summary of Navy's Accomplishments

Since the passage of MPPRCA, the Navy has made significant progress toward complete compliance with its requirements by taking aggressive actions in the areas of shipboard operations, supply system, equipment development, and education.

Navy ships are currently 100 percent in compliance with the nonplastics waste requirements of Annex V (93 percent of total solid wastes), except in the special areas. Ships are also 100 percent in compliance with the zero-plastics discharge requirement when they are at sea for 3 days or less, and 70 percent in compliance overall.

The Navy achieved this level of compliance beginning in March 1989, when all U.S. Navy ships began retaining all plastics waste on board for at least the last 3 days, and nonfood-contaminated plastics waste for at least the first 20 days they are at sea.

NAVY ACTIONS IN RESPONSE TO MPPRCA

In the supply area, the Navy completed reviewing specifications for 350,000 supply items to identify opportunities for replacing plastic items, packing, or packaging. This effort is being accelerated to complete review of the total number of Navy managed items (672,000) in early 1993. The Navy is working with DLA, GSA, and industry on the enormous task of making changes where practicable.

Navy supply centers are reducing the amount of plastic overwrap and intermediate packaging on supplies sent to ships by switching to reusable containers as much as possible.

In the area of education, the Navy twice sent educational packages to all ships, which included guidelines, posters, brochures, and videotapes about plastics waste, the Navy's program, and the new requirements. Navy schools are adding formal training and awareness about plastics waste to their curricula.

3.

Schedule For Achieving Maximum Compliance

The Navy expects to achieve maximum surface ship compliance with all provisions of MPPRCA and Annex V in 1998. The Navy is committed to achieving maximum submarine compliance with all provisions of MPPRCA and Annex V in the year 2008. Navy ships and submarines have already achieved full compliance with MPPRCA requirements for nonplastics solid waste discharges, but not for plastics waste nor special areas.

Compliance with MPPRCA presents the Navy with an array of problems caused by the different regulations depending on the type of solid waste (plastics or nonplastics solid waste) and geographic location (special areas or non-special areas), and the different types of Navy vessels and their characteristics.

The Navy is giving priority status to the program and is working to accelerate development, procurement, delivery, and installation of solid waste processing equipment. Actions are under way to complete or have in progress installations of the Navy's metal/glass shredder, solid waste pulper, and plastics waste processor in surface ships by the end of 1998. These actions include the following:

- Accelerating developing, testing, procurement, and installation of shipboard equipment.
- Programming for hardware production, acquisition, and ship installations prior to completion of hardware development.
- Assigning priority status to equipment installations at the earliest opportunities, including modifying some ships in advance of shipboard solid waste production equipment availability.

Normally, the development and fleetwide installation of a new piece of shipboard equipment takes 25 years or more to complete because the entire process has prescribed phases and milestones that must occur sequentially. For the PWP, the Navy originally planned to begin research, development, test, and evaluation (RDT&E) in 1990 and complete fleetwide installation in 2001, an 11-year process. The Navy has taken actions that should further accelerate the schedule.

SCHEDULE FOR ACHIEVING MAXIMUM COMPLIANCE

For all three pieces of shipboard equipment, the normal development, acquisition, and ship installation schedules have been accelerated. As an example, the design, construction, laboratory testing, and shipboard evaluation will be performed more concurrently than is customary in Navy R&D programs. The funding and schedules for installing equipment have been programmed, even though the equipment has neither completed development nor been approved for full production. The normal 24-month lead time for having procurement contracts in place before scheduled installations will be reduced. The normal lead time for having equipment "on the pier" before scheduled installation will also be reduced.

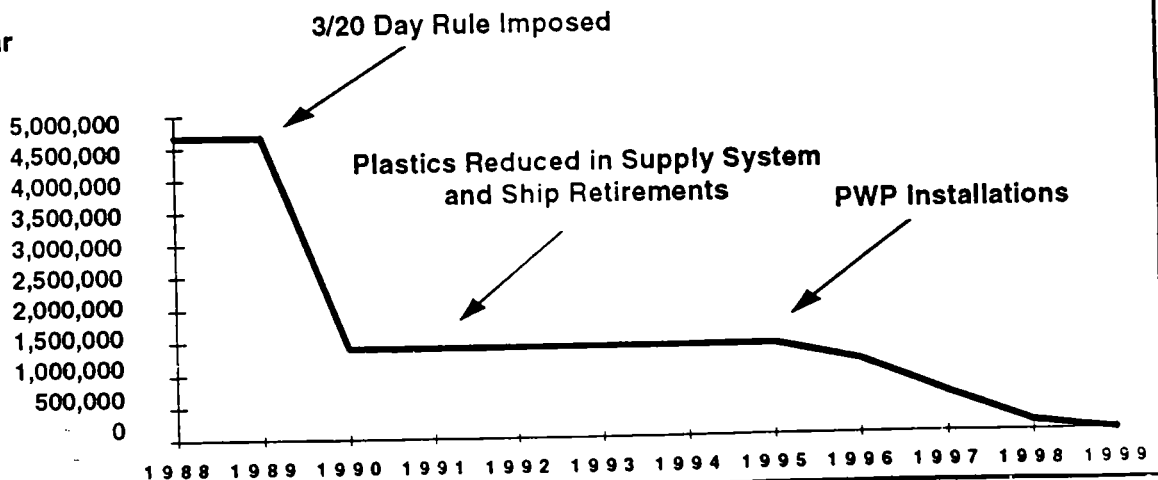
The normal 5-to-7 years for fleetwide installations will be reduced by giving priority status to the installation work at the earliest opportunity.

The Navy's overall progress and schedule for eliminating plastics discharge at sea from surface ships is shown in Figure 2.

Figure 2

Elimination of Plastics Waste Discharges from U.S. Navy Surface Ships

Lbs. /Year



SCHEDULE FOR ACHIEVING MAXIMUM COMPLIANCE

Additional time will be required to achieve maximum compliance for submarines. Submarines have extremely limited space in which to install waste processing equipment, or to store waste. Furthermore, the atmosphere in a submarine must be very carefully controlled, since that atmosphere supports the crew for as long as the submarine remains submerged. Waste processing equipment that might affect the atmosphere (such as the plastics processor) and waste management practices that might introduce airborne contamination (such as storage of food waste) are therefore impracticable on submarines. New technology must be developed to accommodate the special requirements of submarines.

In the meantime, submarine crews are already removing unnecessary plastic wrappings from supplies before they are taken on board. The amount of material discharged from submarines is small, since the crew size is relatively small (around 100 persons). Solid waste generated at sea is compacted and placed in sinkable metal containers, which are discharged when the submarine is operating either 25 miles or more from shore, or at least 12 miles from shore and in 6,000 feet of water.

4.

Impediments To Full Compliance By 1994

The Navy cannot fully comply with zero-plastics discharge requirement of MPPRCA and Annex V by December 31, 1993 because:

- 1) The shipboard solid and plastics waste management equipment cannot be developed and installed on all ships by that date;
- 2) Food-contaminated plastics waste cannot be stored on board for more than 3 days without unacceptable odors and potential health, sanitation, and fire risks; and
- 3) Suitable nonplastic substitutes for all plastic items taken aboard are not available.

4.1 Availability of Shipboard Solid and Plastics Waste Management Equipment

The Navy cannot develop, test, produce, and install on all ships, the shipboard equipment needed for full compliance by December 31, 1993. The three pieces of shipboard solid and plastics waste management equipment (metal/glass shredder, solid waste pulper, and plastics waste processor) are at different stages of development in a Navy laboratory.

The most important piece of equipment for eliminating the last 27 percent of plastics waste discharges is the plastics waste processor (PWP). The PWP is in the third year of an accelerated development schedule at the Navy's research center in Annapolis, MD. The planned schedule for completing development and installation of the equipment is presented in Section 3 of this report.

4.2 Inability to Store Food- Contaminated Plastics On Board

Without proper equipment on board to compact and sanitize food-contaminated plastics wastes, Navy ships cannot store such wastes for more than 3 days without causing unacceptable odor problems, increasing risks of fire and pestilence, and exceeding on-board storage capacity. The Navy assessed various alternatives to discharging food-contaminated plastics waste, including odor-barrier bags, washing and sterilizing wastes, and at-sea waste transfers to garbage

ships. None have yet proved sufficiently practical and safe to adopt as an interim measure until PWP's are installed on ships.

Navy researchers developed an odor-barrier bag that can contain odors longer than 3 days, if the bags are properly sealed. However, the potential problems of on board storage space, fire hazards, health risks and ship safety have not been resolved yet. Sterilizing or washing the wastes to reduce odors has proved impractical as a routine procedure. At-sea waste transfer to other ships for storage and transfer to shore would be impractical and pose unacceptable risks for the sending and receiving ships.

The difficulties and hardship associated with separating and storing plastics waste on Navy warships were illustrated by Rear Admiral J.E. Miller of the Naval Supply Systems Command in April 1990 using the following analogy.

You and your family set out by car from California to Maine. You have packed very carefully but you have only enough room for you, your family and some luggage, with a cooler loaded with food and beverage for the journey. You also have access to more soda machines and snack bars where you can purchase candy, chips, soups, sodas, and other goodies along the way, which also creates additional trash. For years there's been no problem with trash disposal along the road, but now they have passed a law and you can no longer dispose of your trash; so you opt to hold it until you reach your final destination.

Three days into your trip, the trash is now starting to get a bit ripe and taking over all the foot/leg room you thought you were going to have during the trip. Your riders are now starting to get a little testy over the cramped quarters and the terrible smell. However, the good news is, you're only four days from your destination.

Navy ships were built for combat. All spaces on board are already being used for equipment, spare parts, or providing a home to the sailors. Living quarters are cramped and have

very little personal storage area. Sailors have already given up personal space to store groceries so ships could complete operations without resupply. Now, they are giving up more living space so they can store the trash they once were able to throw over the side.

Odor-Barrier Bags

For the past two years, the Navy has been experimenting with different materials for making odor-barrier bags and different methods for properly sealing the bags. Navy researchers have identified a plastic resin that can be fabricated into bags capable of containing odors from decaying food wastes for 30 days. However, the bags must be sealed carefully and properly. Two researchers were needed to manually evacuate and properly seal a bag using a portable pump and a hand sealer. The researchers did identify and successfully test a commercial machine (costing approximately \$8,000 each) that allowed one person to evacuate and seal a bag.

The Navy has demonstrated that special odor barrier bags can contain odors under experimental conditions. However, several practical problems have not been resolved yet. First, the bags are not commercially available and would have to be specially fabricated for the Navy's use. Second, handling and storing large numbers of bags for up to 30 days without puncturing some bags may be difficult to achieve in practice. Third, Navy ships do not have sufficient extra space on board to dedicate to waste storage. Lastly, there are potential health and fire risks associated with storing bags of food-contaminated wastes on board for extended periods.

The Navy plans to continue investigating the issues associated with using odor-barrier bags to store food-contaminated plastics wastes on board for more than 3 days. If suitable storage space can be found on ships and the health and safety risks are acceptable, odor-barrier bags may be an acceptable option.

Sterilizing or Washing Plastics Waste

The options of sterilizing or washing plastics waste are not practical on board Navy ships until PWPs are installed. The existing autoclaves on board ships are located in the ships' infirmaries for the daily sterilizing of medical equipment, clothing, and medical wastes. Even if the units were not being used daily for medical applications, they are too small to process the large volume of food-contaminated plastics waste generated each day. More importantly, routinely carrying food-contaminated wastes into the "clean areas" of ships' medical spaces would pose additional sanitation risks for the ships' personnel.

Washing food-contaminated plastics waste on board using improvised equipment and facilities is impractical, ineffective, and too labor-intensive to be a routine shipboard practice. During the Navy's plastics waste management demonstration projects, Navy researchers experimented with washing food-contaminated plastic wastes from the galley and scullery areas. Just simple rinsing of milk bladders, meat wrappings, cottage cheese containers, yogurt cups, and other plastic food-packaging was very tedious and impractical. Rinsing was ineffective unless each item was fully opened and hand-washed. The grease and oils on meat, fish, and shellfish wrappings were not removed by cold water rinsing.

At-Sea Waste Transfer

The Navy assessed the feasibility and risks of transferring solid and plastics waste to other ships for storage and transfer to shore. The practice, while theoretically feasible, would be impractical and would pose unacceptable risks for the following reasons:

- Mobilizing the waste material topside would pose unnecessary logistical burden, unnecessary personnel exposure to potentially unsanitary material, and dangerous topside clutter for the sending ship while underway;

- Increasing the amount of material transferred by high wire increases the risk of personnel injuries on the sending and receiving ships;
- Extending the "alongside" period of retrograde waste would unnecessarily endanger the sending and receiving ships; and
- Receiving ships would be exposed to unnecessary sanitation risks because the ships do not have on-board facilities to properly store the odoriferous and unsanitary plastics waste.

Garbage Barges

Garbage barges are feasible for waste transferred in port and are used by the Navy in foreign ports. They are not suitable for routine at-sea transfers because towing speeds for the barges are too slow to keep up with ships underway. A fleet of special high-speed garbage ships would have to be designed, constructed, and maintained for the Navy to routinely transfer wastes at sea. Such a fleet, again while theoretically feasible, would be costly and its operation would impose the same logistical, sanitation, and safety risks as retrograding wastes at sea.

The potential number and costs of high-speed garbage ships to service the entire Navy fleet throughout the world can be estimated by analogy to the Navy's fleet of oilers (i.e., Navy ships that carry and deliver oil to ships underway). While underway at 12 to 13 knots, Navy ships typically receive fuel every 3 days from oilers. The fleet currently includes 34 oilers to maintain the capability to refuel ships throughout the world's oceans. If a garbage ship were to accompany each oiler as it delivered fuel, 34 high-speed garbage ships would be needed. The annual cost per garbage ship could be approximately \$13 million, which is the annual lease price the Navy currently pays the Military Sealift Command for each high-speed ship that delivers supplies and retrogrades materials from Navy ships at sea. Therefore, a fleet of special garbage ships could cost \$440 million per year (once the ships were designed, constructed, and delivered).



Pictured above is one day's worth of galley waste.

4.3 Lack of Suitable Nonplastic Items

With the imposition of the 3-day/20-day rule for Navy ships to separate and hold plastics waste on board, the Navy increased the sanitation and fire risks to ships and lowered morale of the crews because sailors have to store plastic trash in their berthing areas and work spaces. Although Commanding Officers are authorized to waive this requirement if the risks are too great, most ships comply.

Fire hazards are already high on Navy ships because of the tight quarters, industrial and military operations, and large crew sizes. The Navy is continually working to reduce the risks of fire. One of the principal recommendations of the Navy Blue Ribbon Panel that investigated the *USS Stark* incident in 1987, was to reduce fire loads and combustibles on ships. Storing plastics waste on Navy ships is inconsistent with the Navy's goal of reducing fire risks.

The Navy is also continually striving to increase the habitability of its ships as a means of recruiting and retaining high-caliber sailors. Storing wastes throughout a ship decreases sailors' morale, increases sanitation risks, and thwarts the Navy's efforts to increase ship habitability.

The Navy is striving to reduce the amount of plastics taken on board its ships through a variety of measures pierside and by substituting nonplastic items for plastic ones where possible. However, the Navy uses supplies and equipment provided by industry. While the Navy buys large quantities of consumable items, it is still not a large enough consumer to influence market practices. The Navy purchases material and equipment from a number of sources and is constrained by procurement regulations. Supplies are purchased competitively, and economics usually dictates what the manufacturer will choose for packing material—generally plastics.

While the Navy is making progress with substituting nonplastic items, packing, and packaging for plastic ones, the prospects for eliminating a significant portion of plastics taken on Navy ships are poor. The prospects are worse for significantly reducing the remaining plastics waste discharges (i.e., food-contaminated plastics) by substituting nonplastic materials. Plastic packaging of foods is so beneficial for food preservation, freshness, and taste, that the adverse consequences of switching to nonplastics may exceed the benefits of reducing plastics on ships.

5.

Navy Ships That Cannot Achieve Full Compliance

Ships Operating in Special Areas

Navy ships operating for extended periods in special areas designated by Annex V cannot fully comply with the nonplastic discharge limitations of Annex V because of insufficient storage space for solid waste. Annex V prohibits the discharge of any solid waste, except for food waste when beyond 12 nautical miles from shore, in designated special areas (e.g., Mediterranean, Baltic, North, Black, and Red Seas, and the Persian Gulf area). Once shredders are installed, Navy ships will shred trash into sinkable forms, but the ships do not have room to store the bagged trash and must discharge them overboard if operating for more than 3 days in a special area. Many Navy ships will have a metal/glass shredder, solid waste pulper, and plastics waste processor. Some smaller ships; however, will be able to only accommodate a shredder or a pulper.

6.

Beyond Annex V

6.1 Environmentally Sound Ships

To protect maritime environmental quality, the Navy is taking actions that go beyond MPPRCA and Annex V requirements. The Navy has established the goal of achieving environmentally sound ships of the 21st century that will be able to treat or destroy all waste on board. The Shipboard Solid and Plastics Waste Program will eliminate floating debris discharges worldwide. The Navy is also investigating degradable materials and plastics waste recycling options.

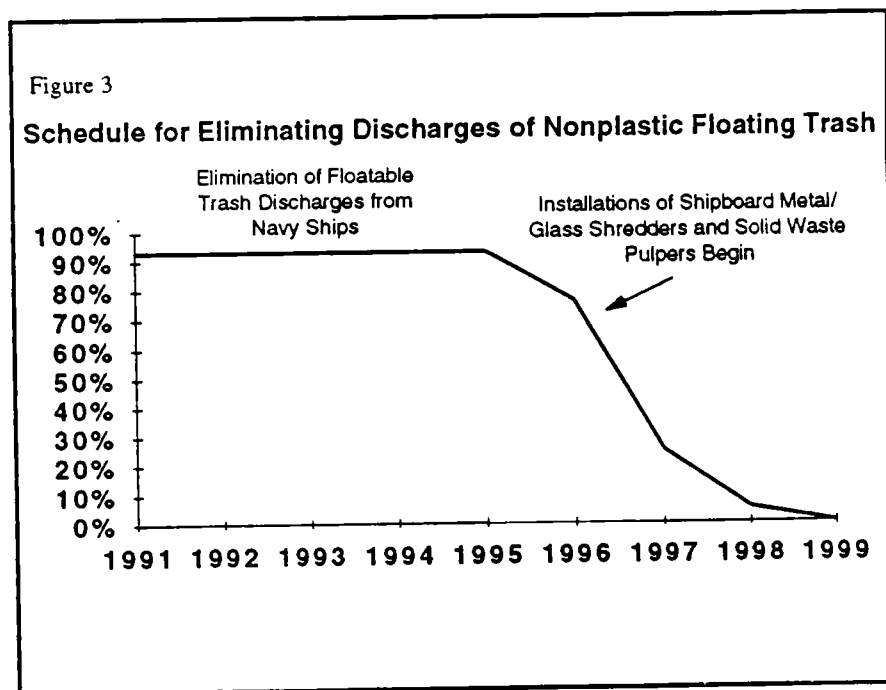
We expect naval ships operating in the 21st century to meet increasingly stringent environmental regulations. The Navy has a comprehensive Shipboard Pollution Abatement Program under way that will enable ships of the 21st century to be environmentally sound. The goal is for ships to operate worldwide without potential for regulatory constraints, inappropriate dependence on shore facilities, or unreasonable costs imposed by environmental regulations. The basic strategy is to:

- (1) Design and operate ships to minimize waste generation and optimize waste management, and
- (2) Develop shipboard systems that will destroy or appropriately treat the waste generated on board.

If wastes are unavoidable and cannot be destroyed or retained on board for recycling ashore, they must be sufficiently treated to make all overboard discharges environmentally insignificant. We have not yet achieved the ultimate solution for on-board destruction for any shipboard waste stream, but we have made considerable progress in developing on-board capabilities to treat or process solid waste, oily waste, hazardous materials, and medical waste.

6.2 Elimination of Floating Debris

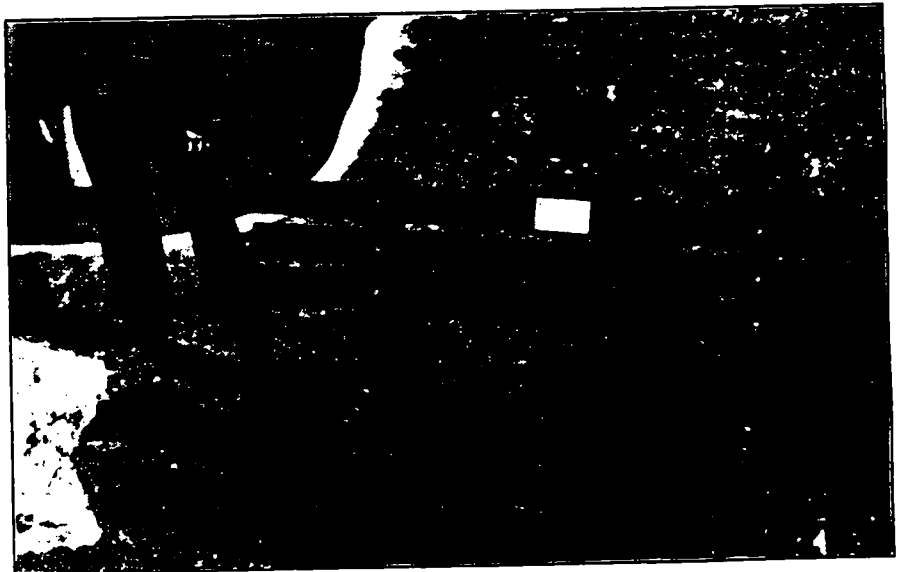
Although Annex V allows the discharge of floating trash and marine debris beyond 25 nautical miles from shore, the Navy has established its own goal of eliminating ship discharges of floating marine debris. Current Navy policy is that ships should weight discharged trash so it will sink; however, this is often difficult to do without a metal/glass shredder or solid waste pulper. As the Navy installs the shipboard trash shredders and/or solid waste pulpers, ships will no longer discharge trash that floats. The solid waste pulper will pulverize pulpable trash into a slurry that quickly disperses and sinks. The shredder will produce sinkable forms of unpulpable trash. Installation of shredders and pulpers should be complete in 1998. Figure 3 shows the Navy's schedule for eliminating floating trash discharge.



6.3 Recycling Plastics Waste

Ultimately, it may be possible to recycle the plastic that the ships return to shore, rather than dispose of it in landfills. The Navy is evaluating methods and program options for recycling plastics waste in partnership with the Society of the Plastics Industry Council for Solid Waste Solutions. An initial pilot study was conducted in 1990 to recycle plastics waste removed from an aircraft carrier and other ships. The plastics waste from the ships was washed, separated, and baled ashore, and then transported to a commercial recycling facility where it was made into plastic lumber for picnic tables, park benches, fence posts, and pallets.

The next phase of the Navy's recycling efforts is a larger, area-wide demonstration project around the Norfolk, Virginia Naval complex. The Norfolk project integrates the plastics waste recycling effort with an overall program to improve solid waste management and disposal costs around Norfolk. If successful, the Navy will encourage other Navy facilities to undertake similar programs.



Pictured above is a bench made from recycled Navy shipboard plastic waste

6.4 Degradable Plastics

The Navy would like to replace current plastic consumable items and packaging with items made of degradable materials if the material performs its function in the shipboard environment. The Navy has initiated a long-term research project to investigate the feasibility of making materials with enhanced degradation rates in the marine environment. The problems to overcome are the numerous types of plastics in common use, the environmental conditions needed for degradation in the deep ocean, the attractiveness of a limited market to potential manufacturers, and the compatibility of degradables with a plastics waste recycling program.

In the Defense Appropriations Act for fiscal years 1991, 1992, and 1993, Congress directed the U.S. Army Research, Development and Engineering Center, Natick, Massachusetts, to conduct research on biodegradable materials to assist the Navy in the control of disposing of plastics waste at sea. Their program activities in development of injection molded and film applications using starch-based polymer blend/lamination technology, include but are not limited to materials fabrication and processing, deep ocean biodegradation exposures, marine toxicity bioassays, nutritional feeding studies, production of end items, and consumer acceptability testing. The Navy is working closely with the Natick facility on this research effort. Pending satisfactory results of the studies, the Navy may find it necessary to further define materials acceptable for disposal under MARPOL.

7.

Recommendations

The Navy offers the following recommendations to the Congress:

1. Increase the period for Navy surface ship compliance with MPPRCA by 5 years.
2. Increase the period for Navy submarine compliance with MPPRCA by 15 years.
3. Change MPPRCA requirements to prohibit discharge of plastics and "floating" debris, rather than the current prohibition of all solid wastes discharges (except food wastes beyond 12 nautical miles) in Annex V special areas.

The Navy supports a national goal of full compliance with Annex V requirements and is working hard to achieve that goal. Beyond Annex V, the Navy has established an objective of achieving environmentally sound ships of the 21st century. The Navy now is taking all reasonable measures to minimize discharges in special areas and from submarines, and will continue searching for suitable technologies that will treat or destroy all wastes on board. The Navy will report annually to concerned Federal agencies on the discharges not authorized under Annex V from submarines and from ships operating in special areas. The Navy will also submit every 5 years to concerned Federal agencies a report reviewing the latest technologies for solid waste management aboard ships, including submarines, and the suitability of the technologies for Navy ships and submarines.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
Washington, D.C. 20503

URGENT

April 26, 1993

LEGISLATIVE REFERRAL MEMORANDUM

LRM #1-337

TO: Legislative Liaison Officer -

AGRIC-CR - Robin Rorapaugh (all testimony) - (202)720-7095 - 230
COMMERCE - Michael A. Levitt - (202)482-3086 - 324
ENERGY - Bob Rabben - (202)886-6718 - 209
JUSTICE - Faith Burton - (202)514-2141 - 217
TRANSPORTATION - Tom Herlihy - (202)366-4687 - 226
CEQ - Larry Flick - (202)395-5750 - 256
EPA - Thomas C. Roberts - (202)260-5414 - 326
GSA - William R. Ratchford - (202)501-0563 - 237
INTERIOR - Ralph Hill - (202)208-6706 - 329

FROM:

RONALD K. PETERSON (for)

Assistant Director for Legislative Reference

OMB CONTACT: Craig CRUTCHFIELD (395-3857)

Secretary's line (for simple responses): 395-6194

Jim McDIVITT (395-3715)

SUBJECT:

DEFENSE Proposed Testimony RE: S 21,
California Desert Protection Act of 1993

DEADLINE: 11:00 A.M. April 27, 1993

COMMENTS: Interior will also testify on this bill. If you do not respond by the deadline, we must assume your agency has no comment.

OMB requests the views of your agency on the above subject before advising on its relationship to the program of the President, in accordance with OMB Circular A-19.

Please advise us if this item will affect direct spending or receipts for purposes of the the "Pay-As-You-Go" provisions of Title XIII of the Omnibus Budget Reconciliation Act of 1990.

CC:

C. Tuttle
K. McGinty
K. Way
G. Simon
J. Palmieri
L. Hauber

URGENT

For 6pg

NOT FOR PUBLICATION UNTIL RELEASED
BY THE COMMITTEE ON ENERGY AND
NATURAL RESOURCES
UNITED STATES SENATE

STATEMENT OF
GERALD A. KAUVAR
PRINCIPAL DEPUTY TO THE
DEPUTY ASSISTANT SECRETARY OF DEFENSE
(INSTALLATIONS)
BEFORE THE
SUBCOMMITTEE ON
PUBLIC LANDS, NATIONAL PARKS AND FORESTS
OF THE
ENERGY AND NATURAL RESOURCES COMMITTEE
ON
THE CALIFORNIA DESERT PROTECTION ACT OF 1993
S. 21
APRIL 28, 1993

NOT FOR PUBLICATION UNTIL RELEASED BY
THE COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

Mr. Chairman:

Thank you for the opportunity to testify today on the California desert Protection Act, S. 21. The Act represents a major step forward in protection the pristine environment of our California deserts and will go a long way to ensure that this valued national treasure is preserved for future generations.

Appearing with me today are expert witnesses from each of the Military Services, who will describe the mission of their installation and be available to answer any questions you may have following my remarks.

The Department of Defense has five major installations that are affected by the proposed legislation. They are the:

- o China Lake Naval Weapons Center
- o Chocolate Mountain Aerial Gunnery Range
- o Twentynine Palms Marine Corp Air Ground Combat Range
- o Fort Irwin National Training Center
- o Edwards Air Force Base

S. 21, as well as the companion bills introduced in the House of Representatives, H.R. 518 and H.R. 880, has the potential to affect significantly the national security interests of the Department of Defense both now and in the future. The old DoD opposed this bill on the grounds that protecting the desert could not be reconciled with our military activity there. The new DoD, the changed DoD, is here today to support S. 21, with some modest modifications and to tell you that the President, Vice President and Secretary Aspin believe that environmental security is vital to national security. Our national security interests can be protected without jeopardizing the important environmental heritage that S. 21 provides.

Why does DoD train and test its weapons in the majestic landscape of the California desert? We have steadily moved our training and weapons testing away from more populated areas into less populated areas, like the southern California desert, to provide the means for realistic testing and training. We have no place else to go where we can prepare our young men and women for the next time they must go in harm's way. The deployment and success of U.S. Forces in the Persian Gulf underscores the need for large-scale desert training areas affording the greatest degree of reality if we are to continue to be an effective fighting force in challenging terrain and climatic conditions.

Today's land and airspace are barely sufficient to accomplish this essential preparation. The Department's objective is to ensure that we maintain sufficient room for our weapons testing, gunnery ranges and combat maneuver exercises. With some minor boundary modifications, we believe S.21 will ensure that the California desert continues to be protected

natural resource and the premier location for vital military weapons testing and combat readiness training.

To ensure that our military remains the best in the world, we believe that legislation protecting the California desert should expressly permit low-level military aircraft overflight of wilderness areas both now and in the future. In modern air warfare, high-speed, low-level flight is essential for survival as evidenced in Operation Desert Storm. California desert legislation should recognize the compatibility between land use designations and essential low-level military overflight. For example, we need low-level routes to test today's cruise missiles that didn't even exist a few years ago.

We also need flexibility to expand, not only to meet current requirements, but also to keep pace as the technical complexity of our units, weapons, and tactics improve.

S.21 addresses many of the military's previous concerns regarding issues such as military overflight, buffer zones and access corridors. The maps, referred to in the bill, have recently been made available to the Department and we are currently reviewing them to determine if modifications or refinements might be needed. Since the Department of Defense is working closely with the Committee staff and the Department of Interior, we are confident that essential military needs will be accommodated. Let me briefly explain the four specific issues on which our staffs are currently working. The Department's concerns are as follows:

(1) Military Overflight: The language in section 801 and 802 assuages our concerns regarding low level overflights but, in a few areas of particularly high usage, potential conflict between low level overflights and wilderness and park uses still remains. This could lead to future attempts to erode the overflight language. Accordingly, we propose adjusting the boundaries of four wilderness areas to preclude future conflict. Those areas are Golden Valley, Grass Valley, Coso Range, and Argus Range. Additionally, we request that the language in section 801.(b) (3) that states "under appropriate terms and conditions" be deleted.

(2) Access Corridors: We are working to ensure that the bill reflects map boundaries delineating an unpaved movement corridor from Fort Irwin to Marine Corps Base Twentynine Palms through the Cady Mountains. Also, the access corridor provided for in the Claghorn Lakes Wilderness area requires utility lines to support training.

(3) Fort Irwin Expansion: The maps should ensure that the future expansion of the Army's premier training base can be accomplished.

(4) Land Exchanges: Federal land at the five affected DoD facilities (Fort Irvin, Twentynine Palms, China Lake, Edwards Air Force Base and the Chocolate Mountains) should be specifically excluded from participation in land or mineral rights exchanges to support the establishment of wilderness or park areas.

While previous administrations have opposed prior California desert legislation, current DoD leadership strongly believes that national security includes environmental security. When we put people first, as the military has always done, we must also protect our environment. The new DoD is committed to protecting our environmental security. In this instance, that means supporting the protection of the California desert area S.21. The basic compatibility between Defense and environmental concerns is demonstrated at numerous military bases which provide sanctuaries for wildlife threatened by encroaching civilization. The Department will not be content to merely be a good steward of its lands, but will be a leader in safeguarding the environment for future generations. We look forward to working with the Committee on this most important legislation.

*** TOTAL PAGE.005 ***

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
Washington, D.C. 20503

SPECIAL

August 26, 1993

LEGISLATIVE REFERRAL MEMORANDUM

LRM #I-1149

TO: Legislative Liaison Officer -

AGRICULTURE - Marvin Shapiro - (202)720-1516 - 312
INTERIOR - Ralph Hill - (202)208-6706 - 329
JUSTICE - Sheila F. Anthony - (202)514-2141 - 217
NSC - William H. Itoh - (202)395-3723 - 249
CEQ - - (202)395-5750 - 256
NASA - Jeff Lawrence - (202)358-1948 - 219
EPA - Thomas C. Roberts - (202)260-5414 - 326

FROM: RONALD K. PETERSON (for) *Ronald K. Peterson*
Assistant Director for Legislative Reference

OMB CONTACT: MIKE GOAD (395-7301)
Secretary's line (for simple responses): 395-6194
John SCHUHART (395-4734)

SUBJECT: DEFENSE Proposed Report RE: HR 2655, Limit
DOD Missile Launches Where Debris Lands
Outside Test Range

DEADLINE: September 1, 1993

OMB requests the views of your agency on the above subject before advising on its relationship to the program of the President, in accordance with OMB Circular A-19.

Please advise us if this item will affect direct spending or receipts for purposes of the the "Pay-As-You-Go" provisions of Title XIII of the Omnibus Budget Reconciliation Act of 1990.

CC:

J. Palmieri
B. Martin
H. Paster

K. McGINTY *✓*

The Honorable Ronald V. Dellums
Chairman, Committee on Armed Services
House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

This is in response to your request for the views of the Department of Defense on H.R. 2655, 103rd Congress, a bill "To prohibit the Secretary of Defense from carrying out the launch of a missile as part of a test program in any case in which an unavoidable or anticipated result of the launch would be the release of debris in a land area of the United States outside a designated Department of Defense test range."

The Department of Defense opposes the legislation.

H.R. 2655 would prohibit the Department of Defense from carrying out missile launches as part of a test program in any case in which an unavoidable or anticipated result of the launch would be the release of debris in a land area of the United States outside a DoD test range.

As part of the Extended Test Range decision-making process, the Department is conducting an Environmental Impact Statement (EIS) and has held public scoping meetings in Utah, New Mexico, Florida and California. A draft EIS will be publicly disseminated and public hearings will be held. The purpose of the National Environmental Policy Act (NEPA) process is to involve the public and affected agencies in the federal decision-making process by actively inviting their input for consideration in the final decision. The proposed legislation would preempt the NEPA process which has proven to be effective to protect the public interest.

The proposed legislation unnecessarily restricts military operations and test activities. The selection of any extended range alternative through the NEPA process requires extensive analysis. The process examines environmental, safety, land use, and social-economic consequences of several test ranges. The Act requires that we consider all reasonable alternatives. We are concerned that a precipitous decision to eliminate consideration of launches from any of these alternative sites might be viewed as a failure to fully consider alternative sites under NEPA. The draft EIS will be available later this year.

Additionally, the proposed legislation greatly impacts our ability to adequately conduct missile defense test and evaluation. Although some of these tests can be performed "over water," recovery on a government range of the post intercept debris, which yields significant system performance data, would be virtually impossible. Secondly, logistics of moving test

assets and resources to over-water sites would invariably increase cost of the test and evaluation process while reducing confidence that the system will operate in its intended environment.

The Office of Management and Budget advises that, from the standpoint of the Administration's program, there is no objection to the presentation of this report for the consideration of the Committee.

Sincerely,

1 of 1 items

CQ's WASHINGTON ALERT 08/26/93

HR2655

Shepherd (D-UT)
Introduced in House

07/15/93

(49 lines)

To prohibit the Secretary of Defense from carrying out the launch of a missile as part of a test program in any case in which an unavoidable or anticipated result of the launch would be the release of debris in a land area of the United States outside a designated Department of Defense test range.

Special typefaces used in this bill version:

// \\ Italic
!! !! Bold roman

103D CONGRESS
1ST SESSION

H. R. 2655

To prohibit the Secretary of Defense from carrying out the launch of a missile as part of a test program in any case in which an unavoidable or anticipated result of the launch would be the release of debris in a land area of the United States outside a designated Department of Defense test range.

=====
IN THE HOUSE OF REPRESENTATIVES

July 15, 1993

Ms. SHEPHERD (for herself, Mrs. SCHROEDER, Ms. FURSE, Mr. MILLER of California, Mr. VENTO, Mr. BEILENSON, Mr. HINCHEY, Mr. CONYERS, Mr. WAXMAN, and Mr. EDWARDS of California) introduced the following bill; which was referred to the Committee on Armed Services

=====
A BILL

To prohibit the Secretary of Defense from carrying out the launch of a missile as part of a test program in any case in which an unavoidable or anticipated result of the launch would be the

release of debris in a land area of the United States outside a designated Department of Defense test range.

//Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,\\

!!SECTION 1. LIMITATION ON DEPARTMENT OF DEFENSE MISSILE
LAUNCHES.!!

(a) LIMITATION.--The Secretary of Defense may not conduct a launch of a missile as part of a test program in any case in which an unavoidable or anticipated result of the launch would be the release of debris in a land area of the United States outside a designated Department of Defense test range.

(b) DEFINITION OF DEBRIS.--For purposes of subsection (a), the term "debris" does not include particulate matter that is regulated for considerations of air quality.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
Washington, D.C. 20503

URGENT

September 28, 1993

LEGISLATIVE REFERRAL MEMORANDUM

LRM #M-711

TO: Legislative Liaison Officer -

CEQ - - (202)395-5750 - 256
COMMERCE - Michael A. Levitt - (202)482-3086 - 324
ENERGY - Bob Rabben - (202)586-6718 - 209
EPA - Thomas C. Roberts - (202)260-5414 - 326
GSA - William R. Ratchford - (202)501-0563 - 237
HUD - Edward J. Murphy, Jr. - (202)708-1793 - 215
INTERIOR - Danny Conenstein - (202)208-6706 - 329
JUSTICE - Sheila F. Anthony - (202)514-2141 - 217
NSC - William H. Itoh - (202)395-3723 - 249
NEC - Sonia Mathews - (202)456-6722 - 429

FROM: RONALD K. PETERSON (for) *Ronald K. Peterson*
Assistant Director for Legislative Reference

OMB CONTACT: MIKE GOAD (395-7301)
Secretary's line (for simple responses): 395-6194

SUBJECT: DEFENSE Proposed Testimony on the Base
Closure Process, the Administration's
implementation of approved base closings and
realignments, and provisions of S 1298 and HR
2401 related to the base closure process.

DEADLINE: 4:00 P.M., TODAY, September 28, 1993

COMMENTS: The hearing will be held tomorrow, September 29,
1993; if you do not respond by the deadline, we will assume
that your agency has no comment. Please note that the
Department is unable to make available its report on Ft.
Sheridan, Illinois (see page 12), which will be submitted for
the record; at this time, the draft report opposes section
2845 of S 1298.

OMB requests the views of your agency on the above subject before
advising on its relationship to the program of the President, in
accordance with OMB Circular A-19.

Please advise us if this item will affect direct spending or
receipts for purposes of the "Pay-As-You-Go" provisions of
Title XIII of the Omnibus Budget Reconciliation Act of 1990.

Page 2
LRM #M-711

CC:

B. McLeod

J. Palmieri

H. Paster

S. SWAIN

K. McGINTY

R. FAIRWEATHER

**Statement of Sherri Wasserman Goodman
 Before the Committee on Armed Services
 United States Senate
 September 29, 1993**

Good afternoon, Mr. Chairman and distinguished members of the Committee. It is a pleasure to appear before you today. I welcome the opportunity to address several topics related to the base closure process and the Administration's implementation of approved base closings and realignments.

I plan to discuss: (1) the recent report by the General Accounting Office (GAO) as part of lessons learned during the 1993 base closure process; (2) our emerging plans for the 1995 base closure process; (3) President Clinton's initiatives for speeding environmental cleanup and assisting communities' reuse of closing installations, and (4) issues raised by the 1994 defense authorization bills currently before the Congress. I will also address reuse plans for Fort Sheridan, which I know is of particular concern to the Committee.

Before I turn to these topics, I would like to stress two key points that provide a broader context for the discussion that will follow.

First, the Administration is generally satisfied with the process through which installations have been selected for closure and realignment. I want to commend the Committee for creating the 1988 and 1990 Base Closure and Realignment processes that broke the political log-jam thereby permitting DoD to close bases and rid the Department of unneeded infrastructure. We believe that the process is fundamentally sound, objective, and fair, although there will always be room for future improvements. We look forward to reviewing the process with you to identify possible improvements.

Second, the process of reusing closing military bases has truly entered a new era. The Administration is implementing new initiatives that will accelerate environmental cleanup and foster rapid, productive, community-directed reuse of closing facilities. These initiatives represent dramatic improvements over past practices. Adjusting to the economic and other disruptions caused by closing military installations is always a challenge. The new initiatives will make the challenges more manageable for affected communities, and I will discuss them in detail.

LESSONS LEARNED DURING THE 1993 BASE CLOSURE PROCESS

The Department is pleased that the GAO found the Secretary of Defense's 1993 recommendations and selection process to be sound and the savings to be substantial. The Department is also pleased that the independent analysis conducted by the Defense Base Closure and Realignment Commission has resulted in the Commission recommending to the President the vast majority of the Secretary's recommendations. The President and now the Congress have approved the Commission's recommendations. These recommendations are critical to our goals of maintaining military effectiveness while drawing down the force, reducing the deficit, and reinvesting in America.

I would like to express the Department's thanks to Chairman Courter and the entire Defense Base Closure and Realignment Commission for a job well done on what was often a thankless task, yet one of critical importance to our future. The nation owes them a debt of gratitude.

In regard to GAO's specific recommendations, we would like to work with the GAO this coming year to make all possible improvements in what is an already sound process. While we concurred in much of the GAO's report, we did take exception with some of their findings and recommendations. I would, with your concurrence, like to submit our detailed response to the GAO for the record. I would also like to take this opportunity to discuss the specific recommendations contained in the GAO's report.

The GAO made specific recommendations to the Secretary of Defense regarding direction and supervision over the base closure and realignment process that will ensure consistent data collection and analysis among the DoD components.

We concur. The Department will continue to provide guidance that will allow the Services and Defense Agencies to conduct a comprehensive and detailed selection process that also allows them the latitude to implement the Department's guidance within their own processes. The Department will also continue to issue mandatory, specific guidance where appropriate. However, due to the inherent differences among the Services and Defense Agencies, some flexibility is essential.

We also concur in GAO's recommendation that the Secretary of Defense provide detailed policies and procedures for future cross-service opportunities, including setting common standards and measures. Also, in order for the actions to be effective, the GAO further recommended such policy development be started soon. We agree and have established milestones that are compatible with the time frames for the 1995 base closure and realignment process.

The GAO recommended that the Secretary of Defense (a) establish a supportable standard for assessing cumulative economic impact and (b) review the process to make sure there is sufficient time to consider the results of the assessments.

The Department will work to continuously improve this and all other aspects of the base closure process. In this specific case, the Department would welcome the GAO's recommendations on how the standard for cumulative economic impact could be improved, as well as suggested improvements from the Base Closure Commission.

The GAO further recommended that, for the 1995 round of base closure and realignments, the Secretary of Defense direct the Air Force (a) to establish procedures to fully describe all decision justifications and (b) to expand the Air Force Audit Agency involvement--to include validating the military value grading.

We concur in part. The Air Force Audit Agency (AFAA) was actively involved in the 1993 process. Specifically, AFAA evaluated the BRAC process for compliance with public law and DoD guidance, and assessed the adequacy of the Air Force Base Questionnaire for supporting closure and realignment recommendations. The AFAA also evaluated the validity of the data submitted by bases and commands by assessing its accuracy and consistency, as well as testing the adequacy of internal controls. Although the Department endorses the notion of increased auditor involvement and agrees that auditors can validate subelement grades, the Department does not believe that auditors can validate overall military value grades. Individual criteria roll-up grades and overall military value analyses (which takes into account Criteria I-IV) are matters that are best left to the judgement of decision makers.

The GAO also recommended that, for the 1995 round of base closure and realignments, the Secretary of Defense direct the Director of the Defense Logistics Agency to consider future reductions in the military services' inventories when assessing capacity needs.

We concur. DLA stressed to the GAO review team that there had been very close coordination with the Service inventory control points (ICPs) in attempting to identify DLA storage space requirement reductions resulting from a decrease in Service inventories. DLA will continue to work closely with the Services to estimate future inventory storage requirements. BRAC 95 will provide another opportunity to refine storage requirements.

The GAO recommended that, to improve the DoD cost and savings estimates, the Secretary of Defense identify the

Government-wide implications of the 1995 base closure and realignment recommendations.

We do not concur. The Department has looked at this issue twice before, after the 1988 Commission process and after the 1991 process. We concluded that DoD cannot quantify non-DoD costs with any degree of certainty or accuracy in advance. For example, Medicare costs may increase in certain areas and decrease in others as a result of a base closure or realignment. Hence, it would be very difficult to estimate the cost impact to the Department of Health and Human Services. This is further complicated by the unknown impact of the President's health care proposals. In any event, it is unlikely that the Medicare cost impacts would be large enough to be a deciding factor in the closure or realignment decision.

Changes in rents for Federal properties may also increase or decrease depending on the eventual lessee. The Department has no way of predicting who will occupy the buildings vacated by a closure decision or how much rent they will pay.

The GAO recommended that, to improve the DoD cost and savings estimates, the Secretary of Defense (a) form working groups similar to those previously established to address the limitations of the cost model and (b) address problems experienced during the 1993 round. The GAO noted that, at a minimum, the group should focus on the problems that affect estimating overhead costs for realigning activities.

We concur. The Army will continue to serve as the executive agent for the COBRA model. The Department will ensure that continued periodic reviews of changes needed to improve the model are conducted using the working group approach.

THE 1995 BASE CLOSURE PROCESS

Closure decisions are getting tougher and tougher. However, given our projected force structure reductions, these decisions are even more critical. In testimony before the Defense Subcommittee of the Senate Appropriations Committee on September 14, Secretary Aspin stated that he expects the 1995 closure list "to be the biggest one of all." We are preparing for that now. We are beginning to organize the analytical effort that will generate these closure recommendations. Within the requirements of the 1990 law, we are designing an implementation plan for the internal DoD FY 95 base closure process that will establish a schedule that will start the process sooner, and allow more time for cross-service analysis by functional area with special attention to tradeoffs among logistics and training installations.

Additionally, we are building on the knowledge gained through our previous efforts which resulted in the 1991 and 1993 Base Closure Commissions accepting our recommendations with few exceptions, and the President and the Congress approving them.

The Bottom-Up Review and a New Force-Structure Plan

The 1995 round of base closures and realignments will be based on a new force-structure plan, which will reflect the Department's recently completed Bottom-Up Review and Congresses action on its recommendations.

The Defense Base Closure and Realignment Act of 1990 requires the Department to base its recommendations for base closures and realignments on approved selection criteria and a force-structure plan. According to the law, the force-structure plan for the 1995 round must address the anticipated force structure (the number and type of units in the active and reserve forces of each military department) for fiscal years 1996 through 2001, as well as probable threats to national security and anticipated funding for national defense purposes during the same period.

The force-structure plan for the 1995 process will differ significantly from that used for the 1993 process. The 1993 force-structure plan was based on the Bush Administration's plans for 1994 through 1999, which called for a force structure that included 12 active, 6 reserve, and 2 cadre divisions in the Army, a 425-ship Navy, and just over 15 active and 11 reserve Air Force tactical fighter wings. Earlier this month, the Department announced the results of the Bottom-Up Review, a comprehensive reassessment of the forces required to meet future security challenges. The Bottom-Up Review concluded that forces smaller than those proposed by the Bush Administration could meet future threats with acceptable risks. Accordingly, the Review recommended reductions to a force structure that will include 10 active and the equivalent of about 5 reserve divisions, a 345-ship Navy, and 13 active and 7 reserve Air Force tactical fighter wings.

If the Congress concurs with the results of Bottom-Up Review, the smaller force structure it recommended will require a smaller defense infrastructure. Working through the 1995 base closure and realignment process, we will continue to reduce our infrastructure so that it more accurately reflects the needs of our forces. As Secretary Aspin said in his recent testimony, "...it is so important that as we downsize the operating part of this business, the military, we also downsize the overhead part of it..., the base structure,..."

PRESIDENT CLINTON'S INITIATIVE FOR REVITALIZING
BASE CLOSING COMMUNITIES

On July 2, 1993, President Clinton announced a major new program to speed the economic recovery of communities where military bases are slated to close. In a sharp departure from the past, the Clinton Administration pledged to give top priority to early reuse of the bases' valuable assets by host communities. Rapid redevelopment and creation of new jobs in base closure communities are the goals of the new initiative. Over five years, program resources will total about \$5.0 billion, including \$2.8 billion in economic development and transition assistance for base closure communities and civilian employees at the bases, plus at least \$2.2 billion for environmental cleanup.

The President's program for community reinvestment begins with jobs-centered property disposal that puts local economic redevelopment first. Present law allows the Department to turn over property at a discount or for free for purposes such as recreation--but not for job creation. The Administration plans to make base closure property more affordable to communities when the community's reuse plan will lead to job creation. It will allow communities that have viable plans for economic redevelopment to buy the property at prices within their means or, in appropriate cases, to receive it free of charge. This flexibility is now allowed only when the property is to be used for recreation, aviation, education or public health. The President directed DoD and the National Economic Council (NEC) to report by October 2, 1993, on recommendations, legislative or otherwise, that would permit the disposal of military property at reduced prices to meet the goal of community economic development and job creation. As a result of this review, the Administration has determined that new legislation is required and that the language contained in S.1298, Title XXIX of the Defense Authorization Bill is exactly what is needed. I will discuss S.1298 in detail later in my testimony.

As an incentive for economic reinvestment, DoD will delay or forego receipt of cash from certain real estate transactions and will allow portions of lease or sale proceeds to be kept by the new owner or property manager. Authority to approve interim leases and simple land transfers will be delegated to lower levels and the Federal property screening process will be greatly compressed.

The expeditious disposition of personal property at closing and realigning bases can be a significant enhancement in helping communities make economic reuse and recovery a reality. In the

absence of legislation that is needed to further define specific authorities and responsibilities of the Department of Defense with regard to personal property at closing and realigning bases. Interim guidelines have been issued.

The September 14, 1993, policy guidance states that the Military Departments and Defense Agencies, as appropriate, will take inventories of personal property at these bases as early in the closure process as possible. Consultation with communities, including walk-throughs of non-restricted facilities, will be performed to assist communities in reuse planning. These consultations will include explanations of the personal property disposal process and how it applies to the base concerned, consistent with public law and GSA and DoD regulations. Our new guidance ensures that personal property will not be removed from closing and realigning bases to the detriment of a community's reuse effort.

The second element of the President's plan is fast-track cleanup that removes needless delays while protecting human health and the environment. The Administration's plan will tackle one of the main roadblocks to rapid base reuse by sending professional teams into action at each site, quickly identifying clean parcels for early reuse, selecting appropriate parcels for leasing where cleanup is underway, and hastening the entire cleanup. DoD and EPA will conduct three regional training conferences for the cleanup teams this fall.

Cleanup of contamination at closing bases will be conducted using a common sense approach. There will be a team of DoD, EPA and State representatives at each base, as appropriate, who will be empowered to run the cleanup program. Parcels with no contamination, or with contamination below cleanup levels will be identified quickly and made available for transfer. The cleanup team will conduct a bottom up review of all schedules and plans to speed up the planning, construction and installation of cleanup remedies and will build, publish and implement an action plan to make it happen. DoD will encourage and facilitate reinvestment through the use of leases where cleanup is not complete and will accelerate cleanup through all available means.

In an unprecedented move, DoD will ensure that future recipients of property at closing bases are not responsible for contamination caused by DoD. On July 2, 1993, President Clinton signed the 1993 Supplemental Appropriations Act rescinding the overly restrictive Appropriations language. Similar language in the 1993 Authorization Act ensures that DoD is responsible for the contamination it causes and allows DoD to grant leases and still protect communities. In a recent memo, the Deputy Secretary of Defense rescinded the requirement that all proposed leases or transfers be submitted to the Deputy Secretary for

approval and redelegated the authority to the Military Departments.

The third element of the plan calls for transition coordinators at major bases slated for closure. The Secretary of Defense has created the Base Transition Office and has designated Transition Coordinators for closing bases. The Transition Coordinator will be the single point of contact for cutting red tape in transition and economic reinvestment matters. As the community's ombudsman, providing ready access to Washington decision makers, the Transition Coordinator will speed resolution of such issues as real and personal property disposal, interim leases and environmental reviews and cleanup. Past base closures were hindered for lack of a single, well-informed point of contact and community champion on the base.

By cutting red tape, the Administration expects to open the bases to economic reinvestment in little more than half the time taken in previous base closure rounds. Full time, on-site transition coordinators will help dismantle the two chief obstacles to base reuse: unnecessary delay in tackling environmental problems on the base, and slow, bureaucratic, penny-pinching disposal of the base property.

The fourth element of the plan calls for easy access to transition and redevelopment help for workers and communities. The Clinton Administration is revitalizing these assistance programs by improving opportunities for reinvestment and streamlining requirements for obtaining Federal help. Funds will be available for organization planning, retraining, job placement, infrastructure and consulting services. By targeting federal assistance of other Federal agencies, communities will get the assistance they are eligible for with less red tape.

The fifth and final element is larger economic development planning grants to base closure communities. The Clinton Administration plan provides more funds and pledges faster action for the essential first step in base reuse and economic development.

Organizational and planning grants averaging \$1 million over five years will be available to each area seriously affected by a base closure or major realignment. Approval of these grants will be greatly accelerated. The grants will help communities to quickly establish appropriate local and intergovernmental organizations and to support their efforts to plan, coordinate and implement adjustment strategies. Representatives from the hardest hit communities were invited to the Pentagon in July and were briefed on the accelerated process. Also, the Office of Economic Adjustment (OEA) and the military departments are conducting semiannual regional seminars for affected communities

beginning in October and November to exchange information aimed at improving the opportunities for success.

While the task of remaking the economic foundation of a community is never easy, a closed military base can be a community's single greatest asset in charting a different future. An airfield, a port, or the land, building, furniture and equipment on a base can be the catalyst for local economic development. The Clinton Administration's program will give communities the funds and technical assistance they need to make good use of these assets and plan for the future.

ISSUES RAISED BY 1994 DEFENSE AUTHORIZATION BILLS

S.1298 Title XXIX - Base Closure Assistance

In recognition and support of the President's Five-Part Program, the Senate has authorized, in S.1298, the "Base Closure Communities Act of 1993." This exceptional piece of legislation gives the Secretary of Defense the authority to close bases responsibly, while ensuring that the available real and personal property is conveyed on a timely basis. It gives the Secretary of Defense the authority to transfer or lease real property at less than fair market value and authority to relate personal property, to include common use items, to the real property in the community's reuse plan. Consistent with the President's plan, Federal screening will be accomplished in 30 days and final determinations regarding other Federal agency interests in any portion of a closing installation will be made no later than six months after date of approval of closure. We also support the new screening process for McKinney Homeless Assistance Act providers contained in the legislation. Even though it only allows 30 days for DoD to provide property listings to Housing Urban Development, we believe we can do it. Getting McKinney properties identified within the first six months of the closure process will afford a greater opportunity to integrate homeless real estate needs into community reuse plans.

The establishment of a Community Response Board will give communities an opportunity to take their case to Washington to ensure that administrative roadblocks and red tape don't get in the way of good decisions. Legislative guidelines for the identification of uncontaminated property at closing bases are consistent with those of the President's program and will be achieved. The same is true for completing Environmental Impact Studies not later than 12 months after the date of submittal of the community's reuse plan. Finally, the authority to contract for police, fire, airfield operations and other community services at closing bases is a much needed addition to the bill.

This committee's bill, with the addition of Senator Pryor's amendments, accomplishes this task with a legislative of simplicity which is commendable. The Base Closure Communities Act of 1993 will be simple to execute and will result in expeditious determinations and dispositions of both real and related personal property. One of the strengths of the SASC bill is that it amends the Base Closure Acts of 1988 and 1990 while leaving the Federal Property Act unaltered for non-base closure disposals. This is appropriate because the Federal Property Act was not designed to dispose of entire bases. Created in 1949, the Federal Property Act was crafted at a time when the Federal Government was growing, so its provisions were designed to ensure that growing federal agencies' needs were addressed first and foremost. In today's environment, with Federal Government downsizing not growing, Federal agency requirements for buildings and land should be secondary to the need for local communities to replace DoD jobs with new private sector jobs. In today's economic climate, base closure properties must be used as a catalyst to spur economic revitalization and decisions on reuse should be predicated on local decision-making not Federal or State requirements. Your SASC bill is short on bureaucratic red-tape and long on fast and effective decision-making. The legislated environmental provisions in the bill will ensure prompt determinations and effective cleanup of base closure properties. With the proposed authorities granted in the bill, the Administration will be able to empower local communities to make determinations that will create new jobs and accelerate economic revitalization.

Sale or Conveyance of Real Property for Economic Development
Purposes to Communities Affected by Base Closures

The DoD, the National Economic Council, and other affected Federal Agencies have developed guidelines under which real property could be transferred to local communities in furtherance of President Clinton's Five-Part program to revitalize base closure communities using the authority contained in the committee's bill.

The Administration has settled on a single two-step process as outlined below:

(1) DoD would make an initial determination of the marketability of the property. The primary criterion being the existence of a ready market for the property. If the results of a market test indicate that a ready market exists (i.e., that there is no need for a discounted conveyance in order to spur economic development) the property would be sold at or near to fair market value to the local reuse authority or sold by bid if the local reuse committee was not interested in negotiating a sale.

(2) If the market test indicates that there is no ready market for the property, the property would be conveyed, without compensation, to the local reuse committee under the following conditions:

- The community would assume protection and maintenance responsibility.
- If the property is subsequently sold by the community, the net proceeds from the sale would be split 60 percent to the community and 40 percent to DoD. Net proceeds would mean the total proceeds from the sale minus the cost of capital improvements to the property made by the community. Allowable costs would not include protection and maintenance costs incurred by the community.
- If the property is leased, DoD would receive 25 percent of monthly, quarterly or annual rents with no reduction for capital improvements.
- A standard excess profits clause would be included in deeds or leases to guard against possible fraud.

The result is a simple process with automatic notification of subsequent sales. It avoids contentious issues such as dueling appraisals except when there is a ready market. The taxpayers' interest is also still protected. If the community succeeds, or if the property is sold in the beginning because there is a ready market, the Government would realize proceeds to help defray costs. However, it doesn't require anything from those that don't succeed.

Comments on Other Legislative Language Affecting Base Closures or Environmental Cleanup

There is an amendment that has passed the HASC which must be dealt with during the conference. Section 2819 of H.R.2401 calls for an expansion of base closure law to include consideration of military installations outside the United States for closure and realignment. The Department strongly opposes this amendment.

This amendment would require the Secretary of Defense to include recommendations for the termination and reduction of overseas military operations in the domestic Base Closure Commission process. It also requires that overseas closures or realignments account for a minimum of 25 percent of the closure and realignment recommendations of the Commission and failure to meet the 25 percent minimum would result in the termination of the base closure selection process for that year.

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the same high priority as other objectives of the statute.
Partnerships for Technology Development

We would like to conclude our statement with a brief discussion of a pilot effort which we think holds much promise for remediation technology development. It is our Public Private Partnership project at McClellan Air Force Base, Sacramento, California.

The purpose of the McClellan AFB Public-Private Partnership project is to measure performance and cost of innovative technologies as they operate in a real-world cleanup situation. Of equal importance is communicating results of applications effectively to other Air Force bases, private party sites, and EPA and State regulators. The partnership at McClellan is composed of the California EPA, the Air Force, EPA's Region IX, Technology Innovation Office, Risk Reduction Engineering Laboratory, and Office of Federal Facilities Enforcement, and representatives from seven companies — Monsanto, Dow, DuPont, Xerox, AT&T, Beazer, Inc., and Southern California Edison. The facilitator for the project is Clean Sites, Inc., a non-profit group in Alexandria, VA under contract to SPA.

The process by which new technologies are recommended by EPA and accepted by PRPs is of paramount concern to us. Feedback we received from consulting engineers, EPA project managers, PRPs, and others that have a role in evaluating remedies at sites indicated that sharing risk would be a critical incentive to encourage

- 14 -

greater use of new technologies. PRPs hesitate to assume the cost and potential liability of a failed test at their site, and such hesitation slows down commercialization. Because of the magnitude of the Federal facility cleanup and compliance challenge and the Administration's commitment to catalyze the development of technologies for environmental needs, Federal facilities offer unique opportunities for the development and application of innovative technologies for site cleanup. The use of Federal facilities as test locations for new technologies can be one of the government's contributions to promoting new environmental technologies. McClellan AFB is the first facility to accept this challenge. As a result of their participation, several innovative treatment technologies for soils and ground water will move to full-scale application in 1993/1994. Based on the degree of success of the treatability applications, other Air Force bases, because they have similar contamination, may be able to use technologies identified in the McClellan project.

The private component of the partnership at McClellan consists of seven companies that have technology interests in common with McClellan, and will be involved in the evaluation of the innovative technologies selected at the base. The Air Force will benefit from the collective technical experience provided by these firms, and the firms in turn benefit from valuable data development at low risk to corporate cleanup resources. These companies can transfer this technology experience, similar to the Air Force, to other

DoD strongly opposes this amendment because it would frustrate ending or reducing operations overseas, delay returning United States military forces home to the U.S., and would in effect cancel the 1995 domestic Base Closure Commission process. As of July 1, 1993, the termination or reduction of operations at 840 sites, representing just over 50 percent of our overseas base structure, have been announced. In Europe, operations at over 55 percent of the base structure will be terminated or reduced. As the Department reduces forces in Europe down to the Congressionally mandated level of 100,000 troops, additional return and realignment actions will be announced. The European base structure is therefore being reduced to the minimum necessary to support 100,000 permanently stationed military personnel by 1995. Therefore, by 1995, DoD will already have announced all appropriate overseas closures to support the overall drawdown of forces overseas. There will be no more announcements to make and hence no chance for DoD to meet the 25 percent minimum mandated by this proposed law. As a result, the practical effect of enacting this amendment would be to cancel the last opportunity for future domestic closures under the proven effective Base Closure Commission process. This would have serious implications on the readiness of our forces.

Proposed Land Exchange Regarding Ft. Sheridan

The Committee has asked for the Department's position regarding the proposed land exchange of portions of Ft. Sheridan, Illinois, and a site that has been proposed for an Army Museum in Arlington County, Virginia. I would like to submit for the record the Department's report on the proposed exchange as required by Section 2845 of the Senate version of the National Defense Authorization Bill.

CONCLUSION

It is clear that the Department faces a broad range of issues in the base closure and reuse processes. The issues that I discussed today require all of our attention, as will others in the future, and I look forward to working with you on them as they occur. While we will make every effort to explore possible improvements to the base closure and reuse processes, we begin with a base closure process that is fundamentally sound, and the conviction that the President's initiatives will greatly speed and ease communities' reuse efforts.

I appreciate the opportunity to appear before you today, and stand ready to answer your questions.