REPORT TO CONGRESS ON THE PROGRESS OF THE VESSEL DISPOSAL PROGRAM

March 2011





U. S. Department of Transportation Maritime Administration

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List of Acronyms

Allied Defense Recycling, LLC	(ADR)
Best Management Practices	(BMP)
Beaumont Reserve Fleet	(BRF)
Clean Water Act	(CWA)
Comprehensive Management Plan	(CWA) (CMP)
Continuing Resolution	(CR)
Deep Sink Exercises	(SINKEX)
Environmental Assessment	(EA)
Environmental Protection Agency	(EPA)
Environmental Excellence Initiative	(EEI)
Federal Acquisition Regulation	(FAR)
Fiscal Year	(FY)
Government Accountability Office	(GAO)
Indefinite-Delivery\Indefinite-Quantity	(IDIQ)
James River Reserve Fleet	(JRRF)
Memorandum of Agreement	(MOA)
National Defense Reserve Fleet	(NDRF)
National Invasive Species Act	(NISA)
National Environment Protection Act	(NEPA)
Polychlorinated biphenyls	(PCB)
Suisun Bay Reserve Fleet	(SBRF)
Storm Water Pollution Prevention Plan	(SWPPP)
Test Program for Certain Commercial Items	(TPCCI)
Toxic Substances Control Act	(TSCA)
United States Navy	(NAVY)
United States Coast Guard	(USCG)
Waste Management License	(WML)
Water Quality Control Board	(WQCB)
water Quarty Control Doard	(uyu)

Report to Congress on the Progress of the Vessel Disposal Program

INTRODUCTION

This report is submitted pursuant to the following:

- The Senate Report [S. Rept. 109-109, July 26, 2005] accompanying the Transportation, Treasury, Housing and Urban Development, the Judiciary, the District of Columbia, and Independent Agencies Appropriations Act, 2006, Pub. L. 109-115; 119 Stat. 2396 (2005), which requests periodic reporting on the progress made by the Maritime Administration (Agency) to dispose of the entire inventory of obsolete ships within the National Defense Reserve Fleet (NDRF).
- The National Defense Authorization Act for Fiscal Year 2006, Pub. L. 109-163, § 3505(a); 119 Stat. 3551 (2006), which requires periodic reporting by the Secretary of Transportation, in coordination with the Secretary of the Navy, on progress made in implementing plans to dispose of obsolete ships in its programs.

Section I of this consolidated program report summarizes the Maritime Administration's ship disposal accomplishments in Fiscal Year (FY) 2010 and outlines the ship disposal progress, outlook and challenges for FY 2011. The last report was dated January 2010 and sent to Congress on November 10, 2010. Submission of this report (March 2011) was delayed due to late submission of the January 2010 report, which allowed inclusion of details of the settlement agreement and formal Consent Decree of April 13, 2010, in *Arc Ecology, et al. v. U. S. Maritime Administration, et al.*, Case No. 07-CV-02320, lawsuit in California. The information and data presented in this March 2011 report are current through February 28, 2011.

In coordination with the Secretary of the Navy, this report also includes, in Section II, the status of the Navy's vessel disposal program. The Navy has limited the scope of their input for this report to the status of Navy-owned vessels located at MARAD facilities.

The Program has met or exceeded all of the annual performance measures related to the disposal of its obsolete, non-retention ships for the last five years. The progress made so far in FY 2011 indicates more positive results in the number of ship disposal contracts awarded, ships removed from the three fleet sites for disposal and ship disposal actions completed. This noteworthy progress includes exceeding the measures specific to the California lawsuit Consent Decree requirements for the remediation of loose shipboard paint, vessel drydockings and permanent removal of obsolete ships from the Suisan Bay Reserve Fleet (SBRF).

Agency emphasis on the disposal of our California ships in 2010, which included significant costs related to environmental regulatory compliance and lengthy open ocean tows, resulted in the highest ship disposal program cost per ton since 2001. Despite these challenges, the Agency continues to achieve positive ship disposal results as shown by the annual targets that have been exceeded over the last five years (see tables on page 13). Currently there are only 67 obsolete ships remaining in the Agency's three fleet sites which is a historic low. These results are especially significant given the fact that the Agency's ship disposal responsibilities include compliance with some of the most stringent and costly environmental regulations required of any Federal agency such as drydocking non-retention SBRF ships prior to their terminal tow to a recycling facility.

I. MARITIME ADMINISTRATION SHIP DISPOSAL ACTIVITIES IN FISCAL YEARS 2010-2011

Overview

The Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Pub. L. 106-398, § 3502, 114 Stat. 1654A-490 (2000) (the Act), required the disposal by September 30, 2006, of all vessels in MARAD's NDRF that were not assigned to the Ready Reserve Force or otherwise designated to be used for a particular purpose. In 2001, the Agency established the Program to accomplish the requirements of the Act. From the first quarter of FY 2001 through the end of February 2011, MARAD awarded dismantling contracts for 149 obsolete ships, removed 150 ships from the fleet sites, and completed disposal action on 143 ships. During this same time period, 118 ships have been downgraded from retention to non-retention status and added to the disposal queue. Currently, there are only 67 obsolete ships scheduled for disposal, which include the three vessels that are under contract for disposal and awaiting removal. In a typical year, an additional three to five retention ships will be downgraded and added to the disposal queue annually for the foreseeable future.

Since the establishment of the Program in 2001, MARAD has aggressively pursued all feasible disposal alternatives including domestic recycling, the sale of ships for re-use, artificial reefing, deep-sinking, donation, and the potential for foreign recycling. The Agency first reported to the Congress in 2002 that because of several factors it was unlikely to meet the 2006 statutory disposal deadline for all non-retention ships. In addition to insufficient domestic capacity, other factors that resulted in the missed 2006 deadline included the lack of any active, qualified recycling facilities on the West Coast and the large annual influx of additional obsolete ships into the program.

At present, the domestic ship recycling industry continues to rebound from the 2008 economic downturn, which decreased market demand for ferrous and non-ferrous scrap metal by both domestic and foreign smelters, and dried up credit to ship recycling companies. Scrap steel prices have risen over the past year to about 75% of 2008 pre-economic downturn levels and are expected to remain stable in the near-term. Domestic ship recycling capacity appears to be adequate to process the obsolete MARAD and Navy ships projected to be available for disposal over the next year.

While the current capacity is adequate, the only significant sources of scrap metal to the domestic ship recyclers are MARAD and the U.S. Navy. This narrow supply source of scrap metal is not favorable for capacity growth within the domestic industry unless the Navy begins awarding contracts for the recycling of its inactive aircraft carriers. There were only three qualified domestic facilities in 2001 to compete for recycling contracts. That number increased to seven by the end of FY 2007. There are currently seven facilities with one facility on the East Coast, five on the Gulf Coast and one new facility added in 2010 on the West Coast.

Statutory restrictions in the Toxic Substances Control Act (TSCA) and other environmental regulations effectively preclude foreign dismantling of obsolete vessels as a viable Program option. TSCA prohibits the export of polychlorinated biphenyls (PCBs) and would require a lengthy formal Environmental Protection Agency (EPA) administrative rulemaking process for an exemption allowing the export of obsolete vessels containing PCBs above the regulated limit. Further, vessel export limitations imposed in FY 2009 legislation prohibit the export of NDRF vessels for recycling without Agency certification to Congress that there is insufficient capacity for recycling in the United States.

The MARAD remains committed to disposing of the obsolete vessels in a manner that does not adversely affect the environment. From January 2007 through June 2009, no obsolete ships had been removed from the SBRF because of the litigation in California filed by plaintiffs concerned about environmental impacts of disposal. The Agency initiated a program in June 2009 to drydock vessels to achieve National Invasive Species Act (NISA) compliance prior to the tow of the ships to recycling facilities in other biogeographical areas. Also, in September 2009, the Agency finalized its National Environmental Policy Act (NEPA) analysis, which eliminated a legal barrier to removing SBRF vessels.

In 2009, the Agency contracted with, at that time, the only available San Francisco area drydock facility for drydocking services to remove marine growth from the hull and exfoliated paint from topside surfaces. The drydocking of the Agency's SBRF vessels satisfactorily resolved many of the legal challenges associated with aquatic invasive species and non-permitted discharges (NISA and Clean Water Act (CWA) respectively). For SBRF vessels that are not going into drydock and/or disposed of in the near term, the Agency is currently using a combination of contractor and Government employees to remove loose and exfoliating paint from exterior surfaces and then properly dispose of that material.

The Agency also worked to ensure compliance with the requirements of the CWA within Texas and Virginia for facility operational activities at the James River Reserve Fleet (JRRF) and Beaumont Reserve Fleet (BRF). Permission from Virginia and Texas was previously acquired pertaining to the in-water process for removal of marine growth from vessel hulls prior to departure to a recycling facility.

FY 2010 saw the market price of scrap steel stabilize and an increase in domestic recycling capacity including the significant addition of a West Coast recycler in the San Francisco Bay area. Countering these positive factors is the challenge of remediating exfoliating exterior paint from obsolete ships prior to disposal and the requirement to drydock all SBRF vessels

for the removal of marine growth. Absent further litigation, and assuming industry, market and funding factors do not decline, MARAD projects that the Program will be able to recycle approximately 10-12 SBRF ships per year, or 14-16 ships per year if removing a mix of non-retention ships from all three fleets.

FY 2010 and 2011 Disposal Actions

The ship disposal process, from contract award through dismantlement and recycling, can often span one, two, or even three fiscal years. Table 1, shown below, indicates the date (shaded) for which the award, removal and disposal of Agency non-retention ships have occurred thus far in FY 2011. All FY 2011 contracts were awarded to domestic facilities for recycling. With awards of the vessels shown in Table 1, the high priority ships remaining in MARAD's three fleet sites include only a single vessel in the BRF that is pending contract award for disposal. Table 2 shows the ship disposal actions completed in FY 2010.

Table 1: MARAD FY 2011 Disposal Actions

(Bolded/shaded dates indicate FY 2011 disposal actions as of 2/28/11 and Final Dollar Amounts shown in parentheses are fee-for-service contracts.)

		a		Vessel	Vessel	Vessel	Final
Ship	Fleet	Contractor	Site	Award	Removal	Disposal	Amount (\$)
ISHERWOOD	JRRF	AbleUK	UK	7/23/03	TBD ('11)	TBD ('11)	\$1,950,000
ECKFORD	JRRF	AbleUK	UK	7/23/03	TBD ('11)	TBD ('11)	\$1,050,000
HUNLEY	JRRF	S. Scrap Material Co.	LA	1/5/07	3/7/07	In Progress('11)	\$1,500
COURIER	BRF	S. Scrap Material Co	LA	7/8/08	7/25/08	12/28/10	\$622,588
KITTIWAKE	JRRF	Cayman Is. Art. Reef	CI	2/3/10	2/18/10	1/5/11	\$0
GEN'L PATRICK	SBRF	Esco Marine, Inc	TX	3/18/10	4/15/10	1/25/11	(\$1,592,157)
GEN'L POPE	SBRF	Esco Marine, Inc	TX	4/11/10	5/5/10	In Progress('11)	(\$1,560,847)
GETTYSBURG	SBRF	Esco Marine, Inc	TX	4/19/10	5/21/10	1/12/11	(\$1,447,598)
TALUGA	SBRF	Esco Marine, Inc	TX	4/19/10	7/1/10	In Progress('11)	(\$1,729,791)
FLORIKAN	SBRF	Marine Metals	TX	7/6/10	7/26/10	12/29/10	(\$1,074,099)
BAY	SBRF	Bay Bridge Enterprises	VA	7/26/10	12/28/10	TBD ('11)	(\$921,104)
SOLON TURMAN	SBRF	Allied Defense Recycling	CA	11/5/10	2/2/11	TBD ('12)	(\$1,545,750)
PRESIDENT	SBRF	Allied Defense Recycling	CA	11/5/10	TBD ('11)	TBD ('12)	(\$1,599,500)
AMER. RACER	SBRF	Esco Marine, Inc	TX	11/10/10	12/2/10	TBD ('11)	(\$1,098,533)
AMER. RELIANCE	SBRF	Esco Marine, Inc	TX	11/10/10	12/7/10	TBD ('11)	(\$1,182,753)
STATE OF MAINE	BRF	International Shipbreaking	TX	11/10/10	11/18/10	TBD ('11)	\$760,001
HESS	SBRF	Esco Marine, Inc	TX	12/10/10	1/14/11	TBD ('11)	(\$926,790)
DAWN	SBRF	Esco Marine, Inc	TX	12/10/10	1/7/11	TBD ('11)	(\$1,075,879)
OHIO	BRF	Award Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
LINCOLN	SBRF	Award Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
CLAMP	SBRF	Award Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
SAGAMORE	SBRF	Award Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
BOLSTER	SBRF	Award Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
RECLAIMER	SBRF	Award Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
SPERRY	SBRF	Solicitation Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
THOMASTON	SBRF	Solicitation Pending	TBD	TBD ('11)	TBD ('11)	TBD ('12)	TBD
POINT DEFIANCE	SBRF	Solicitation Pending	TBD	TBD ('11)	TBD ('12)	TBD ('13)	TBD
PATRIOT STATE	JRRF	Solicitation Pending	TBD	TBD ('11)	TBD ('12)	TBD ('13)	TBD
PIONEER CRUSADER	BRF	Solicitation Pending	TBD	TBD ('11)	TBD ('12)	TBD ('13)	TBD

Table 2: MARAD FY 2010 Disposal Actions (Bolded/shaded dates indicate disposal actions completed in FY 2010) and Final Dollar Amounts shown in parentheses are fee-for-service contracts.)

Ship	Fleet	Contractor	Site	Vessel Award	Vessel Removal	Vessel Disposal	Final Amount (\$)
CANISTEO	JRRF	AbleUK	UK	7/23/03	10/6/03	9/8/10	(\$2,808,076)
CALOOSAHATCHEE	JRRF	AbleUK	UK	7/23/03	10/6/03	4/21/10	(\$2,697,304)
COMPASS ISLAND	JRRF	AbleUK	UK	7/23/03	10/16/03	6/3/10	(\$3,663,848)
CANOPUS	JRRF	AbleUK	UK	7/23/03	10/16/03	9/29/10	(\$3,304,328)
ISHERWOOD	JRRF	AbleUK	UK	7/23/03	TBD ('10)	TBD ('11)	\$1,950,000
ECKFORD	JRRF	AbleUK	UK	7/23/03	TBD ('10)	TBD ('11)	\$1,050,000
MONTICELLO	SBRF	Navy SINKEX	CA	9/9/05	6/27/10	7/15/10	(\$1,063,548)
HUNLEY	JRRF	S. Scrap Material Co.	LA	1/5/07	3/7/07	In Progress('11)	\$1,500
AMER. EXPLORER	BRF	S. Scrap Material Co	LA	7/8/08	8/13/08	11/17/09	\$1,052,788
COURIER	BRF	S. Scrap Material Co	LA	7/8/08	7/25/08	In Progress('12)	\$622,588
MILWAUKEE	JRRF	Bay Bridge Enterprises	VA	1/14/09	2/10/09	2/22/10	\$56,410
AMER. OSPREY	BRF	All Star Metals, Inc.	TX	5/4/09	5/19/09	11/11/09	\$12,228
SURIBACHI	JRRF	Int. Shipbreaking Ltd.	TX	6/2/09	7/17/09	12/4/09	\$20,001
ORTOLON	JRRF	Esco Marine, Inc	TX	6/29/09	7/20/09	3/23/10	(\$325,090)
GULF SHIPPER	BRF	Esco Marine, Inc	TX	6/29/09	7/15/09	11/20/09	(\$145,726)
GAGE	JRRF	Esco Marine, Inc	TX	6/30/09	7/23/09	12/21/09	(\$564,910)
GULF FARMER	BRF	Esco Marine, Inc	TX	7/9/09	7/29/09	3/12/10	\$80,726
RESOLUTE	JRRF	Esco Marine, Inc	TX	7/9/09	8/6/09	3/25/10	\$90,726
ESCAPE	JRRF	Bay Bridge Enterprises	VA	8/17/09	9/15/09	2/26/10	(\$115,200)
CAPE COD	JRRF	All Star Metals, Inc.	TX	8/17/09	9/3/09	3/26/10	(\$328,122)
EARLHAM VICTORY	SBRF	All Star Metals, Inc.	TX	10/16/09	12/3/09	6/15/10	(\$1,668,313)
PAN AM. VISTORY	SBRF	All Star Metals, Inc.	TX	10/16/09	11/24/09	8/27/10	(\$1,599,923)
RIDER VICTORY	SBRF	Esco Marine, Inc	TX	1/15/10	3/8/10	7/23/10	(\$1,608,583)
WINTHROP VICTORY	SBRF	Esco Marine, Inc	TX	1/15/10	3/18/10	7/14/10	(\$1,449,857)
M. SANTA YNEZ	SBRF	Esco Marine, Inc	TX	1/15/10	3/31/10	9/20/10	(\$2,089,133)
KITTIWAKE	JRRF	Cayman Is. Art. Reef	CI	2/3/10	2/18/10	In Progress('10)	\$0
GEN'L PATRICK	SBRF	Esco Marine, Inc	TX	3/18/10	4/15/10	In Progress('11)	(\$1,592,157)
GEN'L POPE	SBRF	Esco Marine, Inc	TX	4/11/10	5/5/10	In Progress('11)	(\$1,560,847)
GETTYSBURG	SBRF	Esco Marine, Inc	TX	4/19/10	5/21/10	In Progress('11)	(\$1,580,356)
TALUGA	SBRF	Esco Marine, Inc	TX	4/19/10	7/1/10	In Progress('11)	(\$1,575,891)
FLORIKAN	SBRF	Marine Metals	TX	7/6/10	7/26/10	In Progress ('12)	(\$1,094,241)
BAY	SBRF	Bay Bridge Enterprises	VA	7/26/10	Pending	TBD ('12)	(\$926,619)

Ship Disposal Alternatives

<u>Domestic Recycling</u> – Domestic recycling remains the most expedient disposal alternative relative to other disposal alternatives such as the transfer of ships for use in Navy deep-sink training exercises, artificial reefing, or ship donation.

Per-ton ship disposal costs decreased steadily from FY 2001 through FY 2008. The decrease was attributable to a combination of factors, including potential competition by foreign proposals, increased competition among domestic contractors, and a steady increase in the domestic and international market price of recyclable steel through FY 2008. From FY 2005 through FY 2008, a total of 29 ships were sold with receipts to the Government totaling approximately \$8.6 million. Of the 29 vessel sales, 26 were for recycling and 3 for re-use. Vessel sales slowed the expenditure of ship disposal appropriations and the resulting lower disposal costs during this period were helpful in mitigating increased disposal costs associated with increasing environmental regulation compliance costs and declines in scrap steel markets.

The economic downturn in September/October 2008 increased per-ton ship disposal costs. Concurrent with the start of the economic downturn, domestic recyclers refused to sign sales contracts for purchase offers submitted in response to an Agency vessel sales solicitation for five obsolete ships. The five cancelled recycling sales contracts would have brought \$3.5 million in revenue to the Government. The five ships were re-solicited and fee-for-service contracts were awarded at a cost to the Government of \$1.5 million -- a difference, and total cost to the government, of over \$5 million.

In FY 2009, only five ships were sold for recycling for a total of \$68,638 and no vessel sales occurred in FY 2010 despite a positive trend in scrap market prices. The cost for the eleven ships awarded in recycling contracts in FY 2010 (all SBRF ships) was \$221 per ton -- a significant cost increase over FY 2009 in which no SBRF ships were awarded disposal contracts, and the highest experienced by MARAD since 2001.

Thus far in FY 2011, the market price of scrap steel has continued to increase resulting in the sale of two vessels that have sold for \$2,046,727, with a third sale pending. In addition to the vessels sold, the cost of MARAD fee-for-service contracts has slowly decreased. However, counter to the positive trends, the requirement to drydock and hull scrub the Agency's obsolete SBRF ships in California, and the towing of those vessels to the nearest domestic recycling facilities in Texas adds significantly to the overall costs of disposal for SBRF vessels. Even with a new recycling facility now operating on the West Coast, higher cost levels are expected to remain for the majority of SBRF ships in 2011 and beyond. The vessel removal rate of 20+ vessels per year experienced from 2005 through 2008 has diminished because of the Agency's focus and commitment in FY 2010 and 2011 to primarily dispose of the more costly SBRF vessels.

The Agency has four qualified facilities in Brownsville, Texas, one in New Orleans, Louisiana, one in Chesapeake, Virginia, and the facility established in FY 2011 in Vallejo, California, at the former Mare Island Naval Shipyard. The Navy's Program currently awards recycling contracts to only two of these domestic facilities, which has been sufficient to meet the Navy's reduced recycling rate of fewer than five ships per year. The two Navy contractors are also qualified contractors under MARAD's Program and are considered the two domestic facilities with the greatest current throughput capacity. The Navy is considering the feasibility of expanding beyond the two facilities for the recycling of inactive aircraft carriers. If the Navy expands beyond the two recyclers currently shared with MARAD, the combined effect of awards from both organizations to domestic contractors has the potential to cause capacity shortages barring some unforeseen increase by those facilities in resources and production throughput or the opening of new facilities.

<u>Foreign Recycling</u> - MARAD's sole qualified foreign recycler, AbleUK, successfully reacquired its Waste Management License (WML) in 2007 which was required for its facility under the law of the United Kingdom. The WML was voided as part of a legal challenge in 2003. Dismantling of the four Agency vessels exported as part of their original contract in 2003 was completed in FY 2010. Per the terms of the original contract, the completion of the four vessels allows AbleUK to take delivery of two additional JRRF obsolete vessels for recycling, which is scheduled to take place in July 2011.

The Agency has put a hold on accepting new proposals for foreign recycling because of the Administration's concerns about protecting the environment, the statutory restrictions of TSCA and the vessel export limitations imposed in FY 2009 legislation prohibiting the export of NDRF vessels for recycling without Agency certification that there is insufficient capacity for recycling in the United States.

<u>Artificial Reefing</u> - The use of obsolete ships as artificial reefs is currently constrained by low demand for ships by the coastal States. The limited demand is a result of a general reluctance of States to be responsible for the preparation, tow, and sinking of the ships, and to be responsible for the significant costs associated with vessel preparation for reefing. The Agency has the authority to provide financial assistance to the States and will consider such requests if they are comparable to the costs of other feasible disposal methods. However, the Agency will consider providing significant financial assistance to States only for vessels considered to be a higher disposal priority, which are not typically good candidates for artificial reefing.

Interagency Best Management Practices (BMP) for the preparation of ships to be used as artificial reefs were developed and implemented in FY 2006. While the BMPs provide consistent vessel preparation guidance nationwide, they require the removal of all solid PCBs above the regulated limits or application for a time consuming, scientific risk-based approval process to dispose of PCBs in a marine environment. This stringent requirement related to PCB remediation is likely to make artificial reefing cost prohibitive in the future.

Since 2001, MARAD has reefed a total of four ships including three vessels with the States of Texas and Florida. The fourth was the JRRF vessel KITTIWAKE which was transferred to the government of the Cayman Islands for use as an artificial reef in February 2010. The sinking of the vessel occurred in January 2011.

<u>Vessel Donation</u> - Donation of vessels is based on requests from non-profit historical preservationist and humanitarian groups. Historically, donation has not been a significant disposal option; however, MARAD has established a formal donation program to support the efforts of legitimate not-for-profit groups to acquire and preserve vessels. The formal program replaces the previous practice where organizations obtained special legislation for the donation of ships. The authorization for the formal program is contained in Section 3512 of Pub. L. 108-136, the National Defense Authorization Act for Fiscal Year 2004. The only ship donated since FY 2001 was the ARTHUR M. HUDDELL, a World War II Liberty ship transferred in FY 2008 to the government of Greece for use as a museum located in Piraeus.

<u>Navy Fleet Training Exercises</u> – Referred to as SINKEX, the joint Navy and MARAD project to provide target vessels for Navy at-sea live-fire training exercises is an infrequent disposal opportunity with costs that have been comparable to recycling. Vessels are prepared for deep-sinking by the Navy in accordance with procedures that protect the environment as set forth in 40 CFR § 229.2. The feasibility of the Navy fleet training exercise as a viable ship disposal option in the future will depend on cost-effective estimates from the Navy that are comparable in cost to other disposal alternatives and on demand for ships as targets. Only two vessels have been used in the Navy exercises, they include the MAUNA KEA which was used in SINKEX (2006) and the MONTICELLO included in exercises conducted in July 2010.

Ship Disposal Funding

In FY 2010, the Program operated with an appropriation of \$15.0 million, \$12.0 million for the disposal of obsolete ships and \$3.0 million for the continued decommissioning process for the NS SAVANNAH, which is a retention vessel. For FY 2011, the funding for ship disposal is the same as FY 2010 except for a .2% across the board reduction.

Despite consistently exceeding the annual ship award and removal goals, annual carryovers began accumulating because of favorable industry and market conditions from FY 2006 through FY 2008. With the economy and scrap steel markets recovering in FY 2010, there was a carryover of \$19 million in unobligated funds into FY 2011. Factors contributing to this carryover balance included the litigation-related suspension of costly SBRF vessel removals from FY 2007 through FY 2009, strong scrap steel market conditions resulting in sales contracts and strong competitive bidding for fee-for-service contracts by domestic recyclers.

There are several factors that affect whether the recycling of non-retention NDRF ships results in vessel sales and revenues or in paying for recycling services with appropriated funds. The primary factors include the vessel's size/condition, the costs associated with dismantling and hazardous material remediation, the amount of recyclable materials, the market price of scrap metals, the amount of competition for each vessel offered in a recycling solicitation, the length/cost of the tow from the fleet to the recycling facility and the cost to remove marine growth prior to towing to different bio-geographical areas with the highest costs typically associated with SBRF vessels due to the drydocking requirement prior to removal by tow. Thus far in FY 2011, the market and industry factors remain strong as

evidenced by the first obsolete vessel sales since FY 2009. Three vessel sales have occurred in FY 2011 including an SBRF vessel that will be towed to Texas for recycling.

Based on actual cost returns thus far in FY 2011, it is projected that some unobligated carryover funds will be carried over into FY 2012. The anticipated carryover funding and the President's FY 2012 budget request will be sufficient in FY 2012 to counteract the significantly higher costs of drydocking non-retention ships in California (for invasive species and exfoliating paint mitigation) and the 5,000+ nautical mile tow that will be necessary for the recycling of the majority of the thirty-nine non-retention ships remaining in the SBRF.

Comprehensive Management Plan

The FY 2006 Authorization of Appropriations, Title XXXV, MARAD Pub. L. 109-153, § 3505(a), 119 Stat. 3551 (2006) contained a requirement for MARAD to develop a Comprehensive Management Plan (CMP) for the disposal of its obsolete ships. The CMP was developed, implemented, and delivered to Congress in July 2006. The CMP addressed the Program's strategy, performance measures, funding, and decision-making framework for ship disposal in addition to identifying external factors that could affect execution of the plan.

The Maritime Administration's disposal strategy, as discussed in the CMP, continues to be valid and an integrated plan that includes the elements considered critical for both the long-term disposal strategy and short-term disposal decisions. The Program's emphasis continues to be the expedited disposal of obsolete ships presenting the greatest environmental risk. The risk assessments are based on continuous evaluations of the material condition of all of the non-retention ships in inventory. Because of the nearly three-year hiatus (2007-2009) on removing SBRF ships for disposal, in FY 2010, the Program was focused on the exclusive drydocking and removal for recycling of SBRF ships that pose the greatest environmental risk. Vessels removed and disposed of in FY 2011 included a small number of BRF vessels. The mix of vessels disposed of in FY 2012 and beyond will continue to include vessels from all three reserve fleet sites based on vessel material condition (i.e. worst first).

Artificial reefing, donation, use in Navy Fleet SINKEX training exercises, and sales for reuse are not anticipated to account for the removal of more than one to two ships over the next two years. While the Agency's disposal strategy continues to focus on dismantling/recycling as the most expeditious option currently available, all disposal options are continuously being evaluated. Through the use of full and open competition, MARAD continues to utilize all feasible disposal options available to achieve environmentally acceptable removal and disposal of its non-retention ships.

Ship Disposal Performance Measures

The Program's annual performance measures of vessels awarded, vessels removed, and vessels disposed of are the best and most direct measure of progress in disposing of obsolete ships and meeting the Department's environmental stewardship targets. Because of the focus on expedited removal for disposal of SBRF vessels, and the added requirement of drydocking SBRF non-retention ships, performance measures and goals previously developed have been

modified to reflect the terms of the California lawsuit Consent Decree related to the removal and drydocking of SBRF vessels.

The drydocking of the SBRF vessels prior to removal for recycling was a constraint on expedited removals in FY 2010 because there was only one drydocking facility in the San Francisco Bay area capable of handling the majority of the Agency's vessels. The drydocking requirement, coupled with the lack of any West Coast recycling facilities in FY 2010 resulted in fewer ship removals and higher cost disposals relative to disposal of vessels from the Agency's fleets located in Texas and Virginia. In November 2011, Allied Defense Recycling (ADR), located in Vallejo, California, became a qualified recycler and was awarded two ship recycling contracts. The ADR facility is located in the former Mare Island Naval Shipyard and is the Agency's first West Coast recycling facility. The addition of ADR as the seventh qualified recycling facility adds much needed West Coast capacity. It also adds to the competitive industrial base, which could result in lower disposal costs of SBRF vessels.

The Agency's ability to meet future performance targets is based on factors including, but not limited to, the following:

- Timing and amount of annual appropriations.
- Feasibility of disposal options available to the Program.
- Drydock availability and throughput.
- Legal challenges to Program initiatives.
- Availability of commercial towing assets and associated fuel costs.
- The availability of competitive recycling facilities with available capacity and adequate production throughput.
- The costs of aquatic nuisance species sampling, assessment, and threat mitigation, including the drydocking of SBRF ships for the removal of marine growth on the hulls.
- The costs of environmental remediation of hazmat streams such as loose exterior paint present on the obsolete ships.
- The market price of recyclable steel.

Negative trends in any one or a combination of those variables are beyond the Agency's control and can significantly affect meeting the performance targets. The targets for each year are established during the annual budget request process a year and a half prior to the specified budget year.

The three performance measures of contract award, vessel removal and vessel disposal shown in the following tables are the major milestones of the ship disposal cycle. Additional measures were added in FY 2010 specific to the court ordered Consent Decree that resulted from the settlement of the California lawsuit with plaintiffs. Those measures include the annual number of SBRF vessels removed for disposal and the number of SBRF vessels drydocked for the removal of marine growth and loose exterior paint prior to towing to recycling facilities outside of the San Francisco Bay area. Consent Decree requirements for FY 2010 were met or exceeded.

The difference (Δ) between the targets and actual results for vessel awards, removals and disposals over the last nine years shows that all annual targets have been met or exceeded over the last five years. The cumulative differential (Δ) between targets and actual over the ten years is significant and indicative of the Program's overall progress and effectiveness despite the environmental and legal challenges faced. Actual results for FY 2011 are through February 28, 2011.

Number of <u>contracts awarded</u> for the disposal of obsolete vessels from the National Defense Reserve Fleet sites for subsequent disposal.

FY	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Totals (thru 2/28/11)</u>
Target: Actual:												116 149 (Δ + 33)

Number of obsolete <u>vessels removed</u> from the National Defense Reserve Fleet sites for subsequent disposal.

FY	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Totals (thru 2/28/11)</u>
Target: Actual:										10 12	10 7	105 150 (Δ + 45)

Number of obsolete <u>vessels disposed of</u> (i.e., disposal action completed) from the National Defense Reserve Fleet sites.

FY	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>Totals (thru 2/28/11)</u>
Target: Actual:											15 5	122 143 (Δ + 21)

Cumulative number of obsolete <u>SBRF vessels removed</u> from the fleet per the Consent Decree (each year's target and actual totals are cumulative totals since 2010 and not totals for each fiscal year).

 FY
 2010
 2011
 2012
 2013
 2014
 2015
 2016
 2017

 Target:
 10
 20
 28
 32
 38
 44
 50
 57

 Target:
 10
 20
 28
 28

 Actual:
 11
 17

Number of obsolete <u>SBRF vessels drydocked</u> per year per the Consent Decree.

FY	<u>2010</u>	<u>2011</u>	<u>Totals (2/28/11)</u>
Target:	10	14	24
Actual:	10	6	16 (Δ -8)

Over the last three years meeting the annual goals has become more of a challenge due to the economic downturn in 2008, and the Arc Ecology case in California that began in 2007 and was settled in 2010. The FY 2010 and 2011 goals, which were lower than the previous five years, were conditioned by the fact that the majority of vessel awards and removals for 2010 and 2011 would be from the SBRF. Drydock availability, coupled with the 5,000+ nautical mile tow to the East and Gulf Coast recycling facilities, are major constraints that increase costs and slow the removal rate of obsolete SBRF ships.

Ship Disposal Solicitation - Test Program for Certain Commercial Items (TPCCI)

In January 2005, MARAD utilized the Test Program for Certain Commercial Items (TPCCI) under the Federal Acquisition Regulation (FAR) to implement the use of Standing Quotations as the primary method for soliciting ship recycling services. The use of Standing Quotations is a simplified acquisition procedure for the competitive procurement of commercial ship dismantling/recycling services. The Standing Quotation process allows interested vendors to submit proposals on a continuous basis. Proposals are evaluated, and those offerors whose proposals are determined to be technically acceptable form a pool of standing quotations that are qualified to respond to ship specific solicitations for sales and fixed price service offers.

Since it is not possible to predict which vessels may have a positive recycling value to contractors (offerors), the Standing Quotation process includes a solicitation that allows for both sales (purchase) offers and fixed price service offers. Those ships not receiving purchase offers are considered for fixed price service contracts. Contracts are then awarded for the offers that represent the best value to the Federal Government. The Agency's current phased vessel sales and fee-for-service solicitation will allow revised prices and contract awards through the TPCCI program in FY 2011 and 2012.

Environmental Regulation and Related Legal Challenges

The challenges related to NISA and CWA compliance will continue to have significant budget and disposal rate implications for the foreseeable future.

The Agency is complying with the United States Coast Guard's (USCG) application of NISA and its regulations in administering ship disposal activities in order to protect the environment. The USCG and MARAD reached an agreement to accomplish in-water hull cleaning (commonly known as "scamping") to remove soft aquatic growth prior to the movement by tow of the non-retention merchant vessels; however, California will not currently permit scamping of the SBRF obsolete vessels in its territorial waters. Texas and Virginia allow scamping in their waters; however, California currently requires all hull cleaning of obsolete vessels be done on drydock prior to removal.

Additionally, Texas and Louisiana currently require vessels removed from the SBRF to not only be cleaned of marine growth while on drydock, but that the vessels must not remain in the waters of San Francisco Bay longer than 14 days after cleaning and undocking in order for the ships to be allowed into their waters for recycling. The concern is that marine organisms invasive to Texas and Louisiana will re-attach to the ships' hulls if allowed to stay in San Francisco area waters beyond 14 days.

Compliance with the regulations and protective environmental measures has also impacted the removal rate of ships from the Agency's fleet sites and added significantly to ship disposal costs. To date, in-water marine growth mitigation costs have ranged from \$75-\$150 thousand per ship. The requirement to drydock SBRF ships in California to clean underwater hulls of marine growth before removal has averaged approximately \$500 thousand per ship, a significant increase over the cost of available in-water hull cleaning technologies. These additional costs applied to the remaining 39 SBRF ships will continue to have a significant impact on future budget requests. In its settlement agreement of the Arc Ecology case, MARAD has formally committed not to undertake scamping in California waters without the approval of the Regional Board.

Lawsuit Settlement Reached - The United States Government reached agreement with Arc Ecology, San Francisco BayKeeper, Natural Resources Defense Council, and the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board) regarding the maintenance and disposal of obsolete ships owned by MARAD at the SBRF site, resolving a lawsuit in the Eastern District of California. The case, *Arc Ecology, et al. v. U. S. Maritime Administration, et al.*, Case No. 07-CV-02320, was originally filed on October 29, 2007 in the Eastern District of California, Sacramento Division. The parties signed a consent decree on March 31, 2010, and moved the court for its approval and entry, which was given on April 13, 2010.

Under the agreement, MARAD will clean, maintain, and dispose of these ships in a manner that eliminates unpermitted sources of Bay pollution. The Maritime Administration began removing obsolete ships from Suisun Bay for recycling in November 2009 well ahead of the April 2010 settlement.

Under the terms of the settlement:

- Paint and debris will be collected and removed from the horizontal exterior surfaces of the obsolete vessels within 120 days of the Consent Decree being approved by the Court.
- The horizontal exterior surfaces of the obsolete ships will be cleaned every 90 days thereafter to prevent peeling paint from getting into the water and to insure that exfoliated paint is properly disposed; monthly and quarterly inspections will be conducted; and water runoff samples will be collected regularly.
- All the obsolete ships currently located at the site will be cleaned of flaking paint within 2 years.
- The twenty-eight ships in the worst condition are to be removed for disposal by September 30, 2012. To date, seventeen SBRF ships have been removed for disposal.
- Before their removal, these ships will be sent to a local drydock for cleaning of marine growth from the underwater hull and removal of flaking paint from areas above the water.
- All the obsolete ships currently located at the SBRF will be removed for disposal by September 30, 2017.
- Prior to removal, the ships will be maintained according to the California Resources Control Board's General Permit and SWPPP, as monitored by the Regional Board.
- No new ships with excess flaking paint will be admitted to the fleet site.

• The settlement does not affect the custody and retention ships at the SBRF, which are not part of the lawsuit.

The Agency has met or exceeded all of the Consent Decree requirements related to the remediation of loose shipboard paint, vessel drydockings and vessel removals.

Conclusions

An aggressive program of maximizing the use of disposal funding and pursuing all feasible disposal options resulted in the removal of 114 obsolete vessels since 2005. Those removals from the fleet sites have reversed a trend in the growth of the number of obsolete ships in MARAD's custody. There are currently only 67 obsolete ships remaining in MARAD's three fleet sites, which is a historic low. Three of the remaining 67 are under contract and awaiting removal, and six additional ships are pending recycling contract awards.

Moreover, the award and removal of the majority of the program's high priority ships has significantly mitigated the threat of residual oil and exfoliating paint discharge into the environment.

Despite the progress made over the last ten years, the rate of obsolete vessel removal is unlikely to increase beyond the current rate of 10-12 ships per year because of current domestic ship recycling capacity and environmental regulations associated with vessel disposals. Likewise, the cost associated with vessel disposal is unlikely to decrease below current levels as long as there are a significant number of costly SBRF vessels to be disposed of annually unless these costs are offset by a significant increase in the scrap steel market and/or decrease in fuel prices. This is the reason why the 2010 disposal costs were the highest experienced by MARAD since 2001.

The Agency continues to believe that removing the ships is the most effective method for addressing all environmental risks posed by the obsolete vessels in the fleets. However, because of the now settled legal challenges with NISA and the CWA that had delayed the removal of obsolete vessels in the SBRF from January 2007 to October 2009, the Agency is now faced with longer-term management of the vessels, especially those moored in the SBRF in California. In 2008, MARAD established an Environmental Excellence Initiative (EEI) to review the Agency's fleet management practices in the context of long-term vessel custody. The EEI includes refining procedures for accepting vessels into the fleets, identifying and evaluating environmental risks associated with long-term custody of vessels (including exfoliating paint), and development/implementation of longer-term management practices to reduce further environmental risk. The President's FY 2012 budget is requesting specific resources to clean obsolete vessels of loose exterior paint at the fleet sites while awaiting disposal.

The Maritime Administration will continue to investigate all alternatives identified in this report, and others that are identified, to expedite the disposal of its obsolete vessels at qualified facilities and at the least cost to the Government, while giving consideration to worker safety and the environment, as required by the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 Pub. L. 106-398, § 3502; 114 Stat. 1654A-490.

II. PROGRESS OF THE U.S. NAVY'S VESSEL DISPOSAL PROGRAM

Navy-Titled Obsolete Vessels in the Maritime Administration National Defense Reserve Fleet

Table 1: U. S. Navy-Titled Obsolete Vessels in the Maritime Administration National Defense Reserve Fleet designated for disposal

Ship	Location	Method of Disposition	Projected Cost of Disposal
Osprey (MHC 51)	BRF	Foreign Military Sale	\$0
Robin (MHC 54)	BRF	Foreign Military Sale	\$0
Oriole (MHC 55)	BRF	Foreign Military Sale	\$0
Kingfisher (MHC 56)	BRF	Foreign Military Sale	\$0
Cormorant (MHC 57)	BRF	Foreign Military Sale	\$0
Blackhawk (MHC 58)	BRF	Foreign Military Sale	\$0
Falcon (MHC 59)	BRF	Foreign Military Sale	\$0
Shrike (MHC 62)	BRF	Foreign Military Sale	\$0
Iowa (BB 61)	SBRF	Donation hold	\$0
Sea Shadow (IX 529)	SBRF	Donation hold	\$0