OFFICE OF SHIP DISPOSAL PROGRAMS

ANNUAL REPORT
FOR
FISCAL YEAR 2015

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U. S. Department of Transportation

Maritime Administration

MARITIME ADMINISTRATION

OFFICE OF SHIP DISPOSAL PROGRAMS

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EXECUTIVE SUMMARY

The Maritime Administration (MARAD) develops this report annually to provide information on the disposition of MARAD vessels within the National Defense Reserve Fleet (NDRF) that have been determined to be obsolete and classified as non-retention vessels. This report is published each year and provides information on the Office of Ship Disposal Programs (OSDP) for the previous fiscal year.

HISTORIC LOW NUMBER OF VESSELS AWAITING DISPOSAL

MARAD's Ship Disposal Program continues to meet or exceed key performance measures related to the disposal of non-retention ships including the removal of more obsolete vessels annually than the average number of vessels entering the disposal queue. At the end of FY 2015, there were 17 non-retention ships remaining in MARAD's three NDRF sites and two at the U. S. Navy's Naval Inactive Ship Maintenance Facility (NISMF) sites awaiting disposal through MARAD's ship disposal program. This total is a historic low. Noteworthy progress of the Program includes exceeding the measures specific to the March 2010 U.S. District Court for the Eastern District of California Consent Decree requirements for the removal of obsolete ships from the Suisun Bay Reserve Fleet (SBRF). By the end of FY 2015, 54 ships had been removed from the SBRF for disposal, which leaves only three of the 57 ships remaining to be removed by the end of FY 2017. MARAD continues to aggressively pursue removal of the remaining vessels already scheduled within the limits of appropriated funds.

NON-RETENTION VESSEL REMOVALS FROM THE NDRF IN 2015

In FY 2015, MARAD removed a total of eight obsolete NDRF vessels from the Beaumont Reserve Fleet (BRF), the James River Reserve Fleet (JRRF) and the SBRF. Table 1 below identifies the fleet, date and name of the vessels removed for disposal in FY 2015.

Table 1: Vessel Removals in FY 2015

Vessels Removed in FY 2015				
Fleet	**Month Removed**	**Date Removed**	**Vessel**	**Contract Type**
BRF	March	3/31/2015	CAPE LAMBERT	Sale
JRRF	November	11/4/2014	PLATTE	Sale
JRRF	November	11/20/2014	SHENANDOAH	Sale
JRRF	December	12/2/2014	YELLOWSTONE	Sale
JRRF	March	3/6/2015	JAMES MCHENRY	Sale
JRRF	March	3/11/2015	MONONGAHELA	Sale
SBRF	July	7/29/2015	METEOR	Service
SBRF	August	8/5/2015	COMET	Service

BEST VALUE PROCUREMENT

MARAD uses a two-step source selection process, first by qualifying ship recycling facilities and creating a pool of qualified facilities that are then eligible to submit competitive sales offers or price revisions when requested by MARAD. Ship recycling contracts are awarded for the sale or purchase of ship recycling services based on best value to the Government, consistent with the Federal Acquisition Regulation (FAR) procedures and processes for simplified acquisitions. When determining best value, MARAD considers price and non-price factors of performance schedule, facility capacity and past performance. The best value source selection process allows the government to accept an offer other than the best-priced offer, considering both price and non-price factors, that provides the greatest overall benefit to the government.

In FY 2015, MARAD awarded a total of seven best value recycling contracts comprised of five vessel sales contracts, which returned the highest offered single ship sales price and two service contracts, which returned the lowest offered single ship price revision. MARAD procured recycling and shipyard services using appropriated funds for the removal, docking and dismantlement of two SBRF vessels at a total cost of $2,391,209.

SALES REVENUE AND DISTRIBUTION

MARAD ship recycling sales revenue in FY 2015 was $6.1M on sales of five obsolete NDRF vessels. Revenues from the sale of obsolete NDRF vessels do not supplement Ship Disposal Program appropriations. The National Maritime Heritage Act (NMHA) mandates the allocation and distribution of obsolete vessel sales proceeds into the Vessel Operations Revolving Fund (VORF). The distribution of the vessels sales proceeds from the VORF provides 50% for NDRF acquisition, repair and maintenance; 25% for the United States Merchant Marine Academy (USMMA) and the six State maritime academy expenses; and 25% for maritime heritage property preservation and presentation, which includes no less than 12.5% transferred to the National Park Service's (NPS) grant program per the Memorandum of Agreement (MOA) with MARAD and 12.5% for preservation and presentation of maritime heritage property owned by MARAD or to provide additional support to the NPS NMHGP. In FY 2015, approximately $10.7M was distributed to the NDRF for acquisition, repair and maintenance activities; approximately $1.6M to the USMMA; $2,967,863 was distributed to the NPS for the next cycle of the NPS-administered National Maritime Heritage Grant Program and $231,619 was expended for MARAD maritime heritage property preservation.

INDUSTRY OUTREACH

In 2013, MARAD issued a revised ship recycling solicitation that streamlined the solicitation process, reduced the size and complexity of ship recycling contracts and increased the transparency of the process. MARAD has issued updates to the solicitation including better explanations of the "best value" process for award selections. In addition, MARAD posts all awarded contracts, which includes the awarded price and schedule of performance, on its acquisitions website. All offerors can compare their offers to the awarded offer. MARAD also offers individual debriefings to any offeror who requests it to discuss their offer and the best value decision.

In July 2015, Senior MARAD Management met with company officials of Southern Recycling, LLC, and toured the three qualified ship recycling facilities located in New Orleans, Amelia, and Sulphur, LA. In November 2015, MARAD organized a town hall meeting in Brownsville, TX

hosting the ship recycling industry executives, Port officials, Occupational Safety and Health Administration (OSHA) representatives, Defense Logistics Agency (DLA) ship sales contracting officers, Texas General Land Office environmental specialists and the United States Coast Guard (USCG) Port of Brownsville Senior Vessel Safety inspector and discussed various topics of interest to all parties relative to ship recycling and hazardous material remediation. Senior MARAD leadership provided an overview of the ship disposal program including future annual vessel disposal projections, impacts of the current collapses in the price of recycled steel, actual and projected budget appropriations for the program and explained the use of the best value process for award selection.

The Maritime Administrator, OSHA and DLA representatives toured the qualified ship recycling facilities and met individually with each recycler.

NUCLEAR SHIP SAVANNAH

N.S. SAVANNAH (NSS), the world's first nuclear-powered merchant ship, is a retention vessel, administered by the OSDP. Conceived, constructed and operated by MARAD under the Eisenhower Administration's Atoms for Peace program, the NSS is a legacy asset maintained in protective storage in Baltimore, MD. The NSS is licensed and inspected by the U.S. Nuclear Regulatory Commission (NRC), under the authority of a license first issued by the former Atomic Energy Commission (AEC) in 1965. In 1976, after the ship was removed from service and its nuclear facilities were mothballed, the license was modified to permit MARAD to possess but not operate or dismantle the nuclear power plant. The license continues in effect until the nuclear power plant is decommissioned and the license terminated. Decommissioning is a process defined, licensed and inspected by the NRC, with a total allowable time of 60 years for completion. MARAD's deadline to complete decommissioning is December 2031, dating back to permanent cessation of operations in December 1971.

I. SHIP DISPOSAL PROGRAMS

Overview

MARAD established the Ship Disposal Program (SDP) in 2001 to accomplish the requirements of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001, Pub. L. 106-398, § 3502, 114 Stat. 1654A-490 (2000) (the Act), which required the disposal of all vessels in MARAD's NDRF that were not assigned to the Ready Reserve Force (RRF) or otherwise designated to be used for a particular purpose. From the first quarter of FY 2001 through FY 2015, MARAD awarded dismantling contracts for 213 obsolete ships, removed 217 ships from MARAD and Navy NISMF fleet sites and completed disposal action on 214 ships. During this 15-year period, 132 ships were downgraded from retention to non-retention status and added to the disposal queue. At the start of FY 2016, there were only 17 ships designated as non-retention and available for disposal. It is anticipated that an additional two to four 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. While domestic recycling continues to be the most preferred, expedient and cost-effective disposal method for MARAD's non-retention vessels, other disposal options will periodically be evaluated for disposal opportunities.

However, it should be noted that statutory and regulatory restrictions have effectively precluded foreign dismantling of obsolete vessels as a viable Program option. Vessel export limitations imposed in FY 2009 legislation prohibit the export of NDRF vessels for recycling without MARAD certification to Congress that there is insufficient capacity for ship recycling in the United States. Further, the Toxic Substances Control Act (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.

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. MARAD's policy is to prioritize the removal for disposal of non-retention ships that are in the worst material condition with an annual goal of removing its obsolete vessels at a rate that is greater than the number of ships that are added to the disposal list annually.

Domestic Scrap Steel Prices

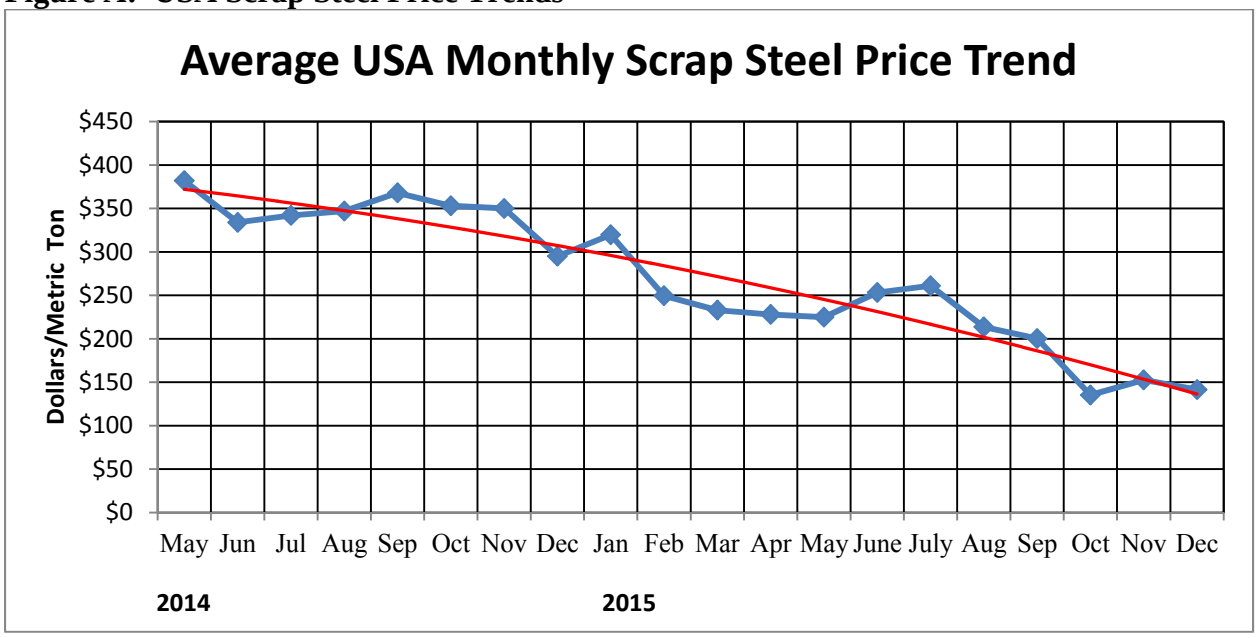
Scrap steel prices continued their sharp downward trend in FY 2015. In January 2015, scrap steel prices were approximately $320 per ton and by October 2015 plummeted to a low of approximately $135 per ton; a 58% decrease. Scrap steel prices had plunged to levels not seen in the previous 10 to 15 years. The scrap steel market has been in a downward spiral since its $400 per ton peak in January 2014 with the most dramatic decline occurring in 2015. Recovery in scrap steel prices is not expected in the near term as continued downward pressure from the slowing of the Chinese economy, weak domestic economy, lower commodity prices, strong dollar and uncertainty regarding interest rates exert pessimistic outlooks for near term price recovery. Short term price fluctuations are expected and will be subject to short term supply and

demand in the scrap metal markets. Significant scrap steel price recovery is not forecasted until late 2016 and possibly into 2017 with scrap steel prices remaining in a narrow range of approximately $150-$250 per ton.

The current low price of scrap steel makes it uneconomical for ship recyclers to recycle MARAD/Navy non-retention vessels without award of a service contract to subsidize costs. Figure A below shows the trend in US scrap steel prices during FY 2015.

Currently, revenues from the sale of the vessel scrap ferrous and non-ferrous metals are insufficient to cover the fixed costs of purchase, towing, insurance, and labor much less the unknown hazardous material remediation costs. Predicting the price of scrap steel five to six months after contract award, when the vessels are undergoing dismantlement, in a declining scrap steel market, along with disposal of unknown quantities of ship board hazardous materials is too great a risk for the smaller recyclers to accept. These factors limit competition for the purchase of vessels, with the recycling industry looking to MARAD and the Navy to subsidize the disposal of non-retention vessels through the procurement of ship recycling services.

Figure A: USA Scrap Steel Price Trends



The sharp decline in the price of scrap steel in FY 2015 has reversed the MARAD ship sales program to the point where ship sales are no longer feasible. MARAD is now required to procure ship recycling services using appropriated funds. MARAD planned to remove three SBRF vessels for disposal in FY 2015 leaving two vessels for disposal in FY 2016. However, the severe drop in scrap steel prices increased ship recycling costs to the point MARAD removed only two SBRF vessels in FY 2015 leaving three vessels remaining to be removed to meet a court Consent Decree in California.

At the start of FY 2015, there were six qualified MARAD ship recycling facilities all located on the Gulf Coast in Louisiana and Texas. Two additional facilities were qualified in May, one in Brownsville, TX and one in Sulphur, LA bringing the total to eight qualified ship recycling

facilities. Domestic ship recycling capacity is currently adequate to meet MARAD's requirements given the decreasing number of non-retention ships available for disposal and the impact of falling scrap steel prices on ship sales and limited appropriations to procure ship recycling services. However, there is concern that the current available industrial capacity and competition for MARAD's vessels will decrease as production continues on the dismantling/recycling of the three Navy aircraft carriers at the three largest qualified recycling facilities and the pending award of two additional carrier recycling contracts by the Navy -- one each in FY 2016 and FY 2017. The evidence of less available capacity was first evident in FY 2014 with the lack of offers on MARAD vessels by recyclers that were awarded Navy aircraft carrier disposal contracts. In FY 2015, low scrap steel prices reduced available capacity as ship recyclers, unable to cover fixed costs through vessel sales, choose not to participate in MARAD ship recycling sales announcements. Volatile scrap steel prices coupled with future price uncertainty increase risk for ship recycling operations. Under capitalized companies are less competitive and increasingly rely on Government service contracts to sustain operations.

Domestic Recycling Industry

The sharp drop in scrap steel prices has severely impacted the domestic ship recycling industry. In March 2015, ESCO Marine, Inc. (ESCO), the largest MARAD qualified ship recycling facility, entered court supervised re-organization proceedings. ESCO's closing removed ship recycling capacity which is no longer available to MARAD for disposal of its non-retention ships. At the time of its closing, ESCO was dismantling the Navy aircraft carrier ex-SARATOGA and two former MARAD vessels SHENANDOAH and YELLOWSTONE. As of October 1, 2015, ESCO was slowly proceeding with plans to re-organize its operations and restart ship recycling activities on both the Navy and former MARAD vessels. It is unclear at this time exactly when, or if, ESCO will re-open and resume operations.

Other MARAD qualified ship recycling facilities have reduced the scope of their operations due to the falling scrap steel markets. MARAD terminated two ship recycling service contracts in July 2015 after the recycler cancelled the contracts due to projected losses from operations directly attributable to the collapse of scrap steel prices after submittal of their offers. As the price of scrap steel continued its steep decline smaller facilities found it harder to obtain financing to continue operations and to acquire new scrapping projects. Seeking fresh capital Marine Metal, Inc. was sold to new owners in November 2015 and Bay Bridge Texas, LLC underwent organizational restructuring to reduce expenses. In September 2015, Marine Metal, Inc. lost its MARAD technical acceptance qualification status due to concerns regarding financial viability. By the end of FY 2015, MARAD had only six qualified operational ship recycling facilities.

Environmental Stewardship

MARAD has implemented strong measures to protect the environment in disposing of obsolete vessels. The Agency initiated a program in June 2009 to drydock SBRF vessels to achieve National Invasive Species Act (NISA) compliance prior towing the ships to recycling facilities in other bio-geographical areas, and by September 2009 satisfied all requirements under the National Environmental Policy Act (NEPA), thereby eliminating a legal barrier to removing SBRF vessels.

In 2009, MARAD 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 cleaning of marine growth and loose exterior paint on drydock is accomplished prior to the tow of SBRF vessels to recycling facilities in different bio-geographical areas to mitigate the transfer of potential invasive marine species and to mitigate the exfoliating of paint during transit. The drydocking of MARAD's SBRF vessels satisfactorily resolved many of the legal challenges associated with aquatic invasive species and non-permitted discharges related to NISA and the Clean Water Act (CWA).

MARAD also worked to ensure compliance with the requirements of the CWA within Texas and Virginia for facility operational activities at the JRRF and BRF. Agreement from regulatory agencies in Virginia and Texas was previously acquired pertaining to the stringent MARAD led initiative in-water process for removal and capture of marine growth from vessel hulls prior to departure to a recycling facility in a different bio-geographical area.

Ship Disposal Alternatives

While domestic dismantling/recycling, sale of ships for re-use, artificial reefing, deep-sinking and donations are all disposal alternatives available to and utilized in the past by MARAD, dismantling/recycling is the most expedient and cost-effective method. Table 2 below shows the number of vessels awarded for disposal since FY 2001 by each method. The 204 ships awarded in recycling contracts represents 95% of the 214 total vessels disposed of by MARAD since 2001. The other 10 vessels were disposed of through the other four disposal methods for which there is significantly less demand and greater cost for the Federal government.

Table 2: Vessel Awards by Fiscal Year

Vessel Awards by Disposal Option by Fiscal Year																	
Type of Disposal	**FY 01**	**FY 02**	**FY 03**	**FY 04**	**FY 05**	**FY 06**	**FY 07**	**FY 08**	**FY 09**	**FY 10**	**FY 11**	**FY 12**	**FY 13**	**FY 14**	**FY 15**	**FY 16**	**Totals**
Recycling (Fee for Service)	5	2	15	11	16	13	14	4	8	11	10	0	0	3	2	0	114
Recycling (Sales)	0	0	0	2	1	5	4	16	5	0	8	16	19	8	5	1	90
Artificial Reefing	1						2			1							4
SINKEX					2												2
Donation								1									1
Sale for Reuse							3										3
Totals	6	2	15	13	19	18	23	21	13	12	18	16	19	11	7	1	214

Awards for FY 2016 are through 12/31/2015

The Agency has four qualified ship recycling facilities in Brownsville, TX and one each in New Orleans, Amelia, and Sulphur, LA.[1] MARAD qualifies ship recycling facilities to ensure the offeror has control of the recycling facility, sufficient knowledge, applicable infrastructure, resources and capabilities to successfully dispose of obsolete MARAD, Navy, or other Federal Agency vessels while protecting the environment and worker health and safety. The Navy's ship disposal program, which includes Navy service contracts for combatant vessels and combatant vessel sales for recycling coordinated by DLA utilizes some of the same facilities. The three recycling contractors currently used by the Navy for dismantling/recycling of its conventional aircraft carriers are also qualified contractors under MARAD's Program and are considered the three domestic facilities with the greatest current capacity. The award by the Navy of two-year recycling contracts in FYs 2014 and 2015 for four aircraft carriers and the increase of contract awards for smaller combatant vessels by DLA in FY 2015 limited competition for MARAD contract awards similar to the circumstances observed in FY 2014.

Best Value Ship Disposal Source Selection Process

The Program utilizes simplified acquisition procedures authorized in Federal Acquisition Regulation (FAR) Part 13, in a competitive procurement process, to facilitate the disposal of MARAD's obsolete vessels through both the sale of vessels for recycling and for the procurement of recycling services. MARAD has issued a standing Request for Proposal (RFP) which allows interested vendors to submit technical proposals on a continuous basis. Technical proposals must address, among other areas, environmental and worker safety and health considerations.

Offerors whose proposals are determined to be technically acceptable form a pool of qualified facilities eligible to compete for sales and service contracts for specific ships identified by MARAD. Offers are evaluated on a best-value basis whereby MARAD considers price and the non-price factors of performance schedule/facility capacity and past performance. As permitted under the simplified acquisition procedures, the relative order of importance of the evaluation factors is not stated in the solicitation. The importance of the evaluation factors for each of the vessel awards is not specified because the trade-offs necessary for selecting the multiple awards are often made based on the specific offers received. This approach also results in a reasonable, timelier and less complicated selection process. The Government Accountability Office assessed MARAD's ship disposal program source selection process and concluded in its February 2014 report to Congressional Committees that MARAD's current ship disposal process for making source selection decisions for vessel sales and price revisions for ship recycling awards is consistent with the FAR's procedures and processes for simplified acquisitions and determining best value.

As an example, a recycling facility may offer the highest sales prices for three ships; however, based on their existing/scheduled workload and available resources, the facility is only capable of accepting and actively working two vessels. A second facility offers a lower sales price for the third ship, but has the capacity to start immediately and can complete the work in a reasonable period of time. In this example, for the potential award of a third vessel to the second facility, capacity/schedule outweighs the higher sale price. This simplified example of the

[1] ESCO retains its technical qualification during the court re-organization proceedings due to statutory requirements which limit actions deemed by the Court as burdensome to the company undergoing re-structuring.

iterative process used to select the best value offer(s) illustrates how the relative importance of the factors may change during the selection process and, as such, cannot be stated with certainty before or at the time of the request for offers/prices. Different trade-offs between price and non-price factors may be warranted depending upon the number of awards being considered for an individual offeror.

MARAD publicly posts the awarded contracts on its web site, disclosing the price and the performance schedule of the successful offeror. MARAD also provides each offeror the opportunity for a debriefing after the contract awards are publically posted. Most often, offerors do not request debriefings because the reason for the award selection is evident from the awarded and publicly posted contract price and/or performance schedule.

Since November 2008, MARAD's recycling solicitations have awarded contracts on a best-value basis for both sales contracts and service contracts. MARAD awarded a total of 95 vessels for recycling from November 2008 through FY 2015 from NDRF and Navy fleet sites. Of the 95 awards, 61 were sales and 34 were service contracts and 81%, (77 of 95), were made to the highest sales offer or the lowest price quotation for a service contract. Therefore, while the relative importance of the evaluation factors is not stated in the solicitation, price is clearly a significant factor though not the sole factor. Achievement of over 80% of the best value awards that result in the maximum return or least cost is assessed to be in the best interest to the U.S. Government and adheres closely to the statute.

Ship Disposal Funding

There are several factors that affect whether the recycling of non-retention NDRF ships are accomplished through vessel sales with revenue to the Government or through service contracts with MARAD paying for recycling services using appropriated funds. The primary factors include the vessel's size/condition, the type and quantity of hazardous materials, the quantity and type of recyclable materials, the market price of scrap metals, the number of competitive bids 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. The highest costs are typically associated with SBRF vessels due to the requirement to drydock each vessel to remove marine growth prior to removal and commencement of the 5,000 mile tow to a Gulf Coast recycling facility. Included in the offeror's proposal are tug mobilization and towing cost, fuel and Panama Canal transit fees. Table 3 below shows the appropriations for the ship disposal program for the current and past five fiscal years.

Table 3: Ship Disposal Annual Appropriations

Annual Ship Disposal Appropriations by Fiscal Year						
Fiscal Year	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**	**FY 2016**
Appropriation	$12 M	$2.5M	$2.4 M	$2.0M	$2.0M /1	$3.0M /2

/1 Represents the Ship Disposal Program apportionment of the $4.0M Ship Disposal appropriation in the Consolidated and Further Continuing Appropriations Act, 2015. The $2.0M balance was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license.
/2 Represents the Ship Disposal Program apportionment of the $5.0M Ship Disposal appropriation in the Consolidated Appropriations Act, 2016. The $2.0M balance was apportioned to the *NS Savannah* for ongoing protective storage activities required under the Nuclear Regulatory Commission license.

Appropriations for ship disposal had been at the $12M annual level from FY 2007 through FY 2011. Despite consistently exceeding the annual ship award and removal goals, annual carryovers accumulated because of favorable industry and market conditions from FY 2006 through FY 2008 allowing the sale of additional vessels. Additionally, the suspension of costly SBRF vessel removals from FY 2007 through FY 2009 because of on-going litigation in California contributed to annual funding carryovers. The 2008-2009 economic downturn resulted in the decline in vessel sales culminating in no vessels being sold in FY 2010, which aided in the spending down some funding carryover, which totaled approximately $26M in FY 2010. However, the economy and scrap steel markets began to recover in FY 2011 resulting in an increase in vessel sales for the Program and a diminished need for appropriations at the $12M level.

In FY 2012, with a carryover of $20M, appropriations were decreased to $2.5M, which coincided with strong scrap steel market conditions and strong competitive bidding for contracts by domestic recyclers resulting in an increasing number of vessel sales from FY 2011 through FY 2013 (see Table 4 below). While the scrap steel market remained strong in FY 2014, available ship recycling capacity decreased due to the award of three Navy aircraft carriers recycling contracts, which resulted in weaker competition for MARAD obsolete vessels. With a carryover level of $6.6M in FY 2014, appropriations were decreased to $2.0M. Apportionment of the Appropriations to SDP for FY 2015 is $2.0M with a carryover of $3.6M. In FY 2015 MARAD utilized the majority of is carryover funding to procure ship recycling and dry-dock services to facilitate the removal of two SBRF vessels. Funds retained due to the termination of two SBRF ship recycling service contracts, one SBRF dry-dock contract and the re-procurement of one of the two SBRF ship recycling service contracts resulted in a carryover level of $902K into FY 2016.

Sales Revenues

Accrued revenue from the sale of non-retention NDRF vessels over the past six years (FY 2010-2015) has been approximately $67 million for dismantling/recycling of 56 ships as shown in Table 4 below.

Table 4: Vessel Sales Revenue

Vessel Sales Revenue by Fiscal Year						
Fiscal Year	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**
Annual Sales Revenue ($):	$0	$7.6M	$18.9M	$24.6M	$9.8M	$6.1M
Vessel Sales Contracts:	0	8	16	19	8	5
Vessel Service Contracts:	12	10	0	0	3	2
Total Recycling Contracts:	**12**	**18**	**16**	**19**	**11**	**7**

- For this chart vessel sale revenues are calculated using the vessel contract award date as the date of receipt of sale revenues in each fiscal year.

Revenues from the sale of obsolete NDRF vessels do not supplement OSDP appropriations. The NMHA mandates the allocation and distribution of obsolete vessel sales proceeds into the VORF. The distribution of the vessels sales proceeds from the VORF is 50% for NDRF acquisition, repair and maintenance; 25% for the USMMA and the six State maritime academy expenses; 25% for maritime heritage property preservation and presentation, which includes a minimum of 12.5% transferred to the NPS's grant program per the MOA with MARAD and 12.5% for

preservation and presentation of maritime heritage property owned by MARAD. The distribution of the 25% to the USMMA and State Maritime Academies since 2009 is shown in Table 5 below. In FY 2015, $10.7M was distributed to the NDRF for acquisition, repair and maintenance activities; $1.60M to the USMMA; $2.97M was distributed to the NPS for the next cycle of the NPS administered NMHGP and $231.6K was expended for MARAD maritime heritage property preservation.

Sales proceeds for MARAD vessels sold in FYs 2016 and 2017 are expected to be negatively affected by the steep drop in the price of recycled steel, pessimistic industry forecasts for a quick market recovery, diminished level of domestic recycling competition and available capacity resulting from the loss of ESCO's financial problems at smaller qualified facilities, U.S. Navy recycling contracts for up to five aircraft carriers and DLA contracts for the recycling of 15-20 combatant vessels.

Table 5: VORF Distributions to the Maritime Academies

VORF Distributions to the USMMA and State Maritime Academies by Fiscal Year								
ACADEMY	**FY 2009**	**FY 2010**	**FY 2011**	**FY 2012**	**FY 2013**	**FY 2014**	**FY 2015**	**SUMMARY**
USMMA	$444,561	$188,143	$147,959	$962,000	$0	$0	$1,600,000	$3,342,663
Maine	$300,000	$0	$60,537	$940,056	$0	$1,000,000	$0	$2,300,593
Mass	$300,000	$0	$20,180	$940,056	$0	$1,000,000	$0	$2,260,236
Great Lakes	$50,000	$0	$20,180	$940,056	$0	$1,000,000	$0	$2,010,236
Texas	$0	$0	$20,180	$940,056	$0	$1,000,000	$0	$1,960,236
California	$450,000	$0	$131,165	$940,056	$0	$1,000,000	$0	$2,521,221
SUNY	$300,000	$0	$131,165	$940,056	$0	$1,000,000	$0	$2,371,221
Annual Total	**$1,844,561**	**$188,143**	**$531,366**	**$6,602,333**	**$0**	**$6,000,000**	**$1,600,000**	**$16,766,403**

Fiscal Year 2016 Disposal Activities

At the start of FY 2016, MARAD had 14 non-retention vessels not yet awarded under a disposal contract, including two vessels that were downgraded to non-retention status in FY 2015. The goal for FY 2016 is the disposal of six non-retention vessels through competitive vessel sales or the procurement of recycling services. All disposal contracts awarded in FY 2016 are anticipated to be for domestic vessel dismantling/recycling.

Five-Year Disposal Program Projections

With the number of non-retention vessels in inventory and awaiting disposal at a historic low, it is anticipated that the number of vessels removed for disposal annually over the next five years will average less than 6 per year. As shown in Figure B, MARAD's annual rate of vessel downgrades outpaced the rate of removals through FY 2007. Since 2007, the backlog of obsolete MARAD ships that accumulated in the 1990s has been steadily eliminated to the point that no more than 20 total vessels are likely to be in non-retention status for the foreseeable future. Table 6 provides a five year projection of non-retention vessel disposals by fiscal year.

Table 6: Vessel Disposal Projections

Vessel Disposal Projections by Fiscal Year					
Fiscal Year	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
Number of Vessels	5-6	5-6	4-6	4-6	4-6

Vessel downgrade projections beyond FY 2017 are estimated due to the numerous variables that affect the availability of additional ships for disposal, such as, the timetable for downgrading vessels to non-retention status, holding vessels for the logistic support of existing RRF vessels and completion of the NHPA Section 106 historic assessment process.

As a result of the decreasing number of obsolete vessels available for disposal and the absence of any high disposal priority ships in poor material condition, MARAD's annual target for vessel removals will decrease. The target number of disposals for FY 2016 is six ships followed by an additional six ships targeted for FY 2017. The 12 ships targeted for disposal in FYs 2016 – 2017 will include the remaining three SBRF vessels, which will complete the requirement for the agency to remove 57 SBRF ships identified for removal in 2010 by the California Court Consent Decree. In FY 2015, MARAD downgraded two vessels to non-retention status and anticipates downgrading three vessels in FY 2016. With the removal of 12 ships in FYs 2016 and 2017, and the downgrading and addition of seven vessels during that period to the disposal inventory, approximately 12 non-retention vessels will remain for disposal at the start of FY 2018.

Supported by industry projections for a prolonged recovery in the price of scrap steel, it is anticipated that disposal costs for both MARAD and Navy overall will increase through FYs 2016 - 2017. The increase in recycling costs is directly attributable to the collapse of the price of recycled steel in FY 2015 and the resulting contractor requirement for the award of ship recycling service contracts to subsidize ship recycling costs until the price of scrap steel rebounds to sustainable levels to justify the purchase of obsolete vessels for recycling. Further, the level of domestic recycling competition and available capacity will continue to be tested as a result of the collapse in the price of recycled steel, the loss of ESCO; facility re-organizations and re-capitalizations; and completion of the three awarded U.S Navy aircraft carriers undergoing dismantlement. The Navy faces delays in completing the recycling of the vessel ex-SARATOGA due to the re-organization of ESCO. Future awards for recycling of additional aircraft carriers will be delayed due to limited available capacity and completion of the carriers currently under dismantlement at International Shipbreaking, Ltd. It is anticipated the Navy will also award two additional aircraft carriers one each in in FYs 2016 - 2017, each with a two year period of performance, further stressing available domestic ship recycling capacity which will affect the number of vessels removed for disposal in the future. A single aircraft carrier is equivalent to the tonnage of approximately 8 to 10 average size MARAD non-retention vessels. Additionally, it is anticipated the DLA will face delays in the solicitation for sales offers for the award of recycling contracts for decommissioned Navy combatant vessels in FYs 2016-2017 as recyclers shy away from the purchase of vessels for recycling until the scrap steel market rebounds to profitable levels.

Ship Disposal Program Performance Measures

The Program's annual performance measures of vessels awarded, vessels removed and vessels disposed are the most direct measure of progress in disposing of obsolete ships and meeting the Agency environmental stewardship targets. MARAD's focus has been 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 Consent Decree related to the removal and drydocking of SBRF vessels.

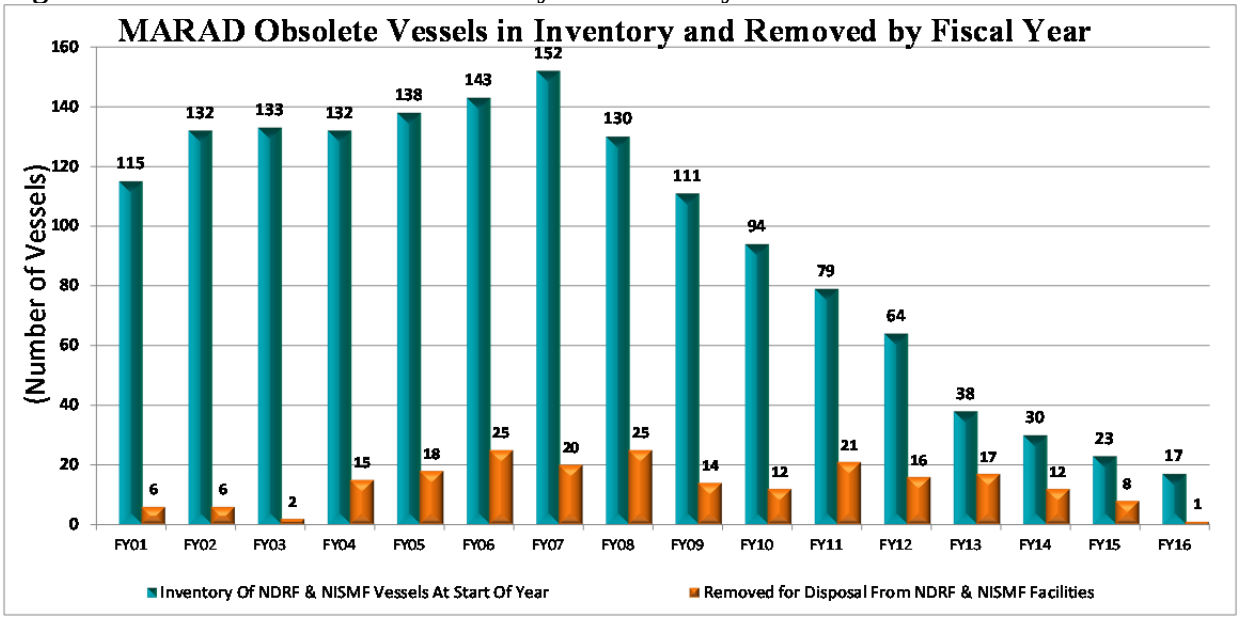
The Agency's ability to meet future performance targets is based on factors including, but not limited to, the following:

- Timing and amount of annual appropriations.
- The availability of competitive recycling facilities with available capacity and adequate production throughput.
- Feasibility of disposal options available to the Program.
- Drydock availability, throughput and cost (SBRF ships only).
- Availability of commercial towing assets and associated fuel costs.
- 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 asbestos, PCB and loose exterior paint present on the obsolete non-retention vessels.
- 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 President's Budget Request development process 18 months prior to the specified budget year.

The most direct measure of the Program's performance is the annual target for vessel removals. Figure B below is a graph of the number of obsolete NDRF vessels in the disposal inventory at the start of each fiscal year and the number of obsolete non-retention vessels removed for each fiscal year from FY 2001 through December of 2015. As shown in Figure C, MARAD has exceeded the ship removal target by an average of 4.0 vessels per year over the 15 year period -- missing the annual target in only three years. In FY 2014, the decrease in domestic recycling capacity available to MARAD, a decrease in competition for MARAD recycling contracts and the length of recycling acquisition cycles resulted in 12 actual ship removals, three short of the target. In FY 2015, the decrease in domestic recycling capacity available to MARAD, a decrease in competition for MARAD recycling contracts and plunge in the price of recycled steel prices resulted in eight actual ship removals, two short of the target.

Figure B: Obsolete Vessels in Inventory/Removals by Fiscal Year



In addition to the total vessels removed from the NDRF for disposal each fiscal year, another measure to gauge Program performance since FY 2010 is the number of SBRF vessels removed to recycling facilities, which is specific to the requirements of the Consent Decree.

Figure C: Vessel Removal Projections Compared to Actual Vessel Removals

Vessel Removal Projections Compared to Actual Vessel Removals

Non-retention vessels removed annually from MARAD NDRF and Navy NISMF sites.

FY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Actuals (Thru FY2015)	
Target:	3	3	4	4	15	13	13	16	14	10	10	12	15	15	10	6	157	
Actual:	6	6	2	15	18	25	20	25	14	12	21	16	17	12	8	TBD	217	**(Δ +60)**

Cumulative number of non-retention SBRF vessels removed from the fleet per the Consent Decree. Each year's target and actual totals are cumulative totals since 2010.

FY	2010	2011	2012	2013	2014	2015	2016	2017
Target:	10	20	28	32	38	44	50	57
Actual:	11	26	36	44	52	54	TBD	TBD

The differential (Δ) between the targets and actual results for vessel removals over the last 15 years shows that all annual targets have been met or exceeded except for three years. The cumulative Δ between targets and actual over the same period is significant and indicative of the Program's overall progress and effectiveness despite the environmental and legal challenges faced.

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 USCG's 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. While California now allows in-water hull cleaning of SBRF obsolete vessels in San Francisco Bay waters with an approved discharge capture method, state regulators in Texas and Louisiana require all hull cleaning of SBRF vessels to be done in drydock out of concern that the in-water cleaning method presents a greater risk of marine species transfer compared to cleaning on drydock. Texas, Virginia, Hawaii and Pennsylvania allow scamping in their waters of NDRF and Navy NISMF vessels.

Additionally, Texas and Louisiana currently require vessels removed from the SBRF to not only be cleaned of marine growth in 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 SBRF ships will continue to have a significant impact on future budget requests.

Under the Consent Decree, MARAD will clean, maintain and dispose of these ships in a manner that eliminates unpermitted sources of Bay pollution. MARAD began removing obsolete ships from Suisun Bay for recycling in November 2009 well ahead of the Consent Decree. All of the 57 obsolete non-retention ships located at the SBRF must be removed for disposal by September 30, 2017. As of the end of FY 2015, 54 of the 57 vessels covered by the Consent Decree have been removed from the SBRF for disposal -- two years ahead of the court ordered schedule. 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 and the environmental Plaintiffs have witnessed the positive results first hand.

II N.S. SAVANNAH
MARAD is responsible for this legacy asset because it is the agency that built and operated it under statutory authority enacted in 1956. MARAD is a Federal licensee as defined in the Atomic Energy Act of 1954, as amended (and implementing regulations at 10 CFR 50.), and is responsible for the asset until the license is terminated through decommissioning. To meet its obligations under the license, MARAD maintains a proficient and competent nuclear capability and licensee organization. That organization, known as the Savannah Technical Staff (STS), is located in the OSDP since the MARAD reorganization of 2007. The STS is a blended organization composed of organic MARAD staff, contractors, and government partner

organizations with decommissioning expertise. The organization and the NSS are unique to MARAD and the Department of Transportation (DOT).

Licensed Activities

The NRC license to possess but not operate or dismantle the nuclear facilities installed onboard the ship is the overarching regulatory authority applicable to the NSS. The license is not limited to the discrete compartments onboard the ship in which nuclear equipment and systems are located; rather, it covers the entire envelope of the ship. The ship itself, whether mobile or stationary, is the licensed site boundary and serves as the primary physical structure to protect the safety and health of the public and environment. Similar to a landside nuclear power plant, all activities within the site boundary (i.e., onboard the ship) are conducted under the authority of the NRC license, and are referred to as licensed activities. There are three major components to the licensed activities program; radiological protection, nuclear compliance; and ship husbandry/ custodial care. MARAD employs a single technical support contractor to provide integrated services in these areas.

Radiological Protection (RP) programs are proscribed by the NRC and are designed to protect workers and visitors (where visitor refers to anyone not trained and qualified as a radiation worker) from the harmful effects of exposure to man-made radiation. The RP program employed onboard the NSS is designed for the site-specific conditions unique to NSS and fully considers the plant's shutdown condition. Comparable programs are maintained at all other shutdown commercial nuclear power plants in the U. S.

Nuclear compliance, sometimes referred to by MARAD as "license technical support" involves the core nuclear skills, disciplines and expertise that establish the institutional competency to manage a nuclear facility. This is the nuclear analog to the comprehensive maritime expertise that MARAD naturally possesses by virtue of its ship owning and ship operations activities. Neither MARAD nor DOT own or maintain any other nuclear power facility; consequently, the specialized nuclear compliance services are critical to MARAD's continued satisfactory performance as a NRC-licensee. Ship husbandry and custodial care services are necessary to maintain and safeguard the ship as the aforementioned primary physical structure of the licensed site. These services are well-within MARAD's normal core competencies.

Licensed activities include administrative programs and a broad spectrum of surveillance, and monitoring actions, preventative maintenance, and radiological and environmental surveys. The comprehensive program is designed to meet the minimum statutory and regulatory obligations imposed by the continued retention of the vessel in protective storage. Detailed annual reports are submitted to the NRC and are publicly available.

MARAD oversight of the STS program is exercised through the organizational line of authority, and also through an Executive Steering Committee (ESC). Appropriated funds are sourced annually in the Ship Disposal Appropriation, with immediate oversight of funds management exercised by the Director, Office of Ship Disposal. The ESC is composed of agency senior civilian management, reporting to the Maritime Administrator. The ESC meets at least annually, and provides a mechanism by which the licensee staff can provide input to, and receive guidance and direction from agency leadership. The STS program manager is the designated licensee, and represents the agency in all matters before the NRC.

Stewardship
The NSS is a Federally-owed National Historic Landmark (NHL). It was designated as a NHL in 1991, and is the only directly-owned, managed and maintained NHL property in the Department of Transportation inventory.[2] Under the provisions of the National Historic Preservation Act (NHPA) of 1966, as amended, the highest standard of care for historic objects falls upon Federal owners of NHLs. Consequently, MARAD maintains an appropriate historic stewardship program for the NSS. With due care and thoughtful planning, MARAD is able to seamlessly integrate stewardship into our licensed activities, and avoid direct costs or similar burdens that might otherwise accrue if stewardship obligations were managed separately

The NSS stewardship obligations are not the sole responsibility of MARAD. Decommissioning and license termination are future Federal undertakings in which the NRC has an equal obligation. The NRC license is the authority under which decommissioning will be performed, and under the provisions of the NHPA, that Federal license to require and permit the undertaking imposes planning and mitigation obligations on the issuing-agency that are effectively equal to those imposed on MARAD as the owner of an NHL. Also important to note is that decommissioning and license termination will not negate the ship's NHL status, and is not intended to result in the immediate disposal of the ship itself. MARAD will retain some measure of stewardship responsibilities post-decommissioning, unless a seamless disposition objective is determined and a plan is developed and implemented during the decommissioning process. Otherwise, stewardship obligations will remain until an independent disposition action is taken post-license termination. All disposition efforts will be considered through the NHPA Section 106 consultative process.

Protective Storage
The vessel is currently berthed at Pier 13, Canton Marine Terminal, 4601 Newgate Ave., Baltimore, MD and is in a state of protective storage. MARAD's contemporary protective storage program meets the intent of NRC regulations and guidelines, and is comparable to the SAFSTOR programs at all other domestic, permanently-shutdown and defueled commercial nuclear power plants. As noted in the overview section, the NSS was initially mothballed in 1976. It was one of the first NRC, formerly the Atomic Energy Commission (AEC), licensed power plants to be permanently shut down and placed into protective storage. The NSS remained in this condition until it was removed from the JRRF in 2006 to begin decommissioning preparations. When the decommissioning project was later suspended, it became necessary to bring NSS into conformance with contemporary protective storage criteria, which had evolved substantially over 30 years of experience. The current NRC regulations and guides define protective storage under the title "SAFSTOR", and require active processes, programs and procedures that are fundamentally equivalent to those present in an operating plant. The work associated with these processes, programs and procedures may be reduced in scope based on the defueled and inoperable condition of the facility, but may not be eliminated. These same processes, programs and procedures are employed in the dismantlement phase of decommissioning, again, with workloads adjusted to match the demands of the decommissioning

[2] Washington Union Station is owned by the DOT, acting through the Federal Railroad Administration. The station complex, including air rights above the tracks, is managed and maintained by the independent Union Station Redevelopment Corporation, a public-private quasi-governmental entity established in 1983.

activities. In addition to these administrative actions, equipment and systems necessary for future decommissioning must be maintained during the protective storage period. NSS-specific examples include but are not limited to, ventilation, electrical lighting and distribution, alarm systems and access controls, ballast systems for list and trim control (presently inoperable), active (versus passive) radiological monitoring (presently inoperable), and mooring equipment. Safety-related systems, structures and components are maintained as described in the ship's Quality Classification List.

MARAD's protective storage program for the NSS combines contemporary nuclear expertise with modified marine best practices drawn from our extensive experience maintaining ships in reduced states of readiness. The NSS has been at the Baltimore location since May 2008. An intended program of technical upgrades to bring NSS into full conformance with current SAFSTOR standards was not completed. To compensate for this technical non-conformance, MARAD, with NRC oversight, employs a robust administrative and surveillance/monitoring program. The ship is berthed at an accessible location to permit this program to be carried out most efficiently, and at lower cost. The vessel is routinely occupied by workers and staff to carry out the licensed activities program. The integrated technical support contract was developed to maximize the effective use of available resources with the ship in this, or a similar, layberthing location.

FY 2015 Significant Activities

In FY 2015, MARAD continued its routine radiological survey program, conducted a pier-side underwater visual inspection of the hull and a close-up visual/ultrasonic thickness inspection at targeted areas of suspected hull thinning, conducted periodic testing of the Cathodic Protection System, completed safety improvements to several exterior aft, port and starboard fire stair exit doors on the upper decks and accomplished modifications to the accommodation ladder for improved emergency egress. Repairs to the combined fire and smoke detection and internal flooding and intrusion alarm system originally installed in 2009 and prone to periodic failures were completed, and the system is operating satisfactorily. Results from the close-up survey of the underwater hull were satisfactory, and the matter was closed.

In 2015, MARAD physically completed projects started in 2014 to environmentally remediate three outlying radiologically controlled areas (RCAs) within the ship. The environmental remediation (consisting of general housekeeping and maintenance of lighting systems) fell within the scope of permissible activities in the license and the work was performed using own-staff resources trained for the purpose. It is expected that these RCAs will be released from radiological controls in the 1st quarter of FY 2016.

III CONCLUSIONS

An aggressive program of maximizing the use of disposal funding and pursuing all feasible disposal options has resulted in the removal of 217 obsolete vessels since 2001. Those removals from the fleet sites have reversed a trend in the growth of the number of obsolete ships in MARAD's custody. As of October 1, 2015, there were only 14 non-retention ships remaining in MARAD's three fleet sites, which is a historic low.

Moreover, the best-value award and removal of all of the Program's high priority ships has significantly mitigated the threat of residual oil and exfoliating paint discharge into the environment.

The MARAD will continue to investigate all alternatives 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.

The contemporary NSS licensed activities program continues to meet both the letter and intent of NRC requirements while maintaining MARAD's required institutional nuclear proficiencies and competencies. The NRC inspections since 2001 have reported no findings of safety significance. Concurrent with those activities, STS maintains and upholds MARAD's continuous focus on its stewardship responsibilities when conducting activities on the NSS site.

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