



U.S. Department of Transportation Maritime Administration

Progress Report

Executive Order 13287 "Preserve America"
Section 3: Improving Federal Agency Planning and Accountability

September 30, 2020

Introduction

This report fulfills the Maritime Administration's (MARAD) requirements under Section 3(c) of Executive Order (EO) 13287, "Preserve America" by providing an update on the state of MARAD's historic properties and its progress over the last three years in meeting the objectives of EO 13287. MARAD's historic properties include one Historic District, one individually-listed National Register building, and one National Historic Landmark.

U.S. Merchant Marine Academy Historic District

MARAD's inventory of historic properties includes the U.S. Merchant Marine Academy (USMMA), located in Kings Point, New York. The USMMA Historic District (USMMA HD), listed on the National Register of Historic Places (NRHP) in 2014 (#14000538), includes contributing mansions constructed during the Gold Coast Era, and the Academy buildings constructed from 1942 to 1969. The District encompasses 30 contributing buildings, nine non-contributing buildings, four structures, three contributing objects, one non-contributing object, and one site. The buildings are used for administrative/office spaces, academic spaces/classrooms, student dormitories, dining, recreation, and general support.



The centerpiece of the District, Wiley Hall, is the former Bendel/Chrysler mansion and serves as USMMA's main administration building.

All buildings require regular planned maintenance and repair. The most common cause of historic building element failure and/or deterioration is not its age, but rather by an incorrect or inappropriate repair and/or neglect of the building's fabric. To address this, MARAD entered into an Interagency Agreement with the U.S. Army Corps of Engineers, Engineers Research and Development Center, Construction Engineering Research Laboratory (ERDC-CERL), who completed an eight-volume manual entitled, "*USMMA HD Property Maintenance and Repair Manual*" in 2018. The manual includes as-is conditions of the Academy's building materials and the Secretary of the Interior's Standards for the Treatment of Historic Properties on Preservation, Rehabilitation, and Repair. The manual covers the following elements by volume: an overview; concrete; wood; brick; metal; roofing; stucco; and mechanical systems. In addition, it includes preservation and maintenance guidelines and procedures for conducting work on historic buildings, monuments, and

memorials. ERDC-CERL also completed a *Landscape Management Plan* in 2018 for the USMMA HD, which established landscape guidelines to aid Academy staff in preserving the Historic District. The plan inventoried the existing cultural landscape, and includes recommendations for managing the historic landscape in the future.

Since 2017, USMMA's Capital Improvement Program (CIP) has consulted with the New York State Historic Preservation Officer (NYSHPO) on several major projects to avoid, minimize, or mitigate adverse effects through the incorporation of design changes and the development of Memorandums of Agreement (MOA).

In 2017, the Academy initiated consultation with the NYSHPO on a plan to renovate Samuels Hall. Samuels Hall contributes to the historic district, and is significant as a Classical Revival style campus building constructed in 1943 to house the seamanship and visual signaling school. The proposed work included building an addition, replacing windows and doors, modifying masonry openings and masonry repair, and altering the interior for the building to serve as a maritime simulator center. In 2018, after exploring alternatives, the Academy and the NYSHPO entered into an MOA to mitigate the undertaking's adverse effect.

That same year, USMMA initiated consultation on a proposed undertaking to remove Crowninshield Pier and boathouse and construct a wave screen in its place, as well as in-kind replacement of Cressy Pier and a portion of the seawall. The Crowninshield Pier and boat house, Cressy Pier, and the portion of the seawall were constructed in 1943 at the southern end of Hague Basin, and contribute to the historic district. After exploring alternatives, the Academy and the NYSHPO developed an MOA in 2017 to mitigate the adverse effect, however, the project was subsequently cancelled. In 2019, staff revisited the project and developed plans to reconstruct Crowninshield Pier at a higher elevation to include a two-story boathouse, reconstruct Cressy Pier at a higher elevation with an enlarged footprint, and demolish Prosser Boathouse and associated stone steps (both non-contributing to the district). Although the Academy is still studying whether to move forward with these design changes, staff resumed consultation with the NYSHPO. When a final design is approved, staff will submit drawings and an effects assessment to the NYSHPO and revise the MOA accordingly.

In 2019, MARAD hired a contractor through Colorado State University, who meets the *Secretary of the Interior's Professional Qualification Standards* to serve as the cultural resources manager (CRM) to assist Academy staff in meeting their NHPA requirements.

Also in 2019, the Academy began work on a Master Plan to guide future campus development. Although the Master Plan has yet to be finalized, several projects were started, including plans to construct a new Midshipmen Activities Center (MAC), which would provide the midshipmen an appropriate space for leisure activities, such as a gym, game room, café, pub, and collaborative study/meeting areas, among other spaces, in keeping with the standards expected of a modern institution and a federal academy. The MAC's proposed location is near the current dining hall and barracks, on the footprint of Land and Melville Halls, thereby requiring the demolition of both buildings. Both Land Hall and Melville Hall contribute to the USMMA HD. Land Hall, an Italian Renaissance Revival style building and Melville Hall, a Mediterranean Revival style building, were constructed in the early-20th century and are significant extant examples of Gold Coast-era mansions. Both Land Hall and Melville Hall were owned by well-known members of the entertainment industry and played a role in the social scene of the day and are significant for their cultural associations with this time period. Additionally, both are architecturally significant as early-20th century revival-style mansions. Land Hall currently functions as a student center, and Melville Hall is used as a meeting and conference facility. USMMA initiated consultation with the NYSHPO in 2020. The NYSHPO requested additional

information including an alternatives analysis study. Architectural/Engineering firms submitted proposals in the summer of 2020, and once a selection is made, CIP staff and the selected firm, assisted by the CRM, will work with the NYSHPO to avoid, minimize, or mitigate adverse effects of this undertaking.

In 2020, the USMMA initiated consultation with the NYSHPO to renovate the Fitch Building and remove Quarters G. The Fitch Building contributes to the district, and is significant as a Classical Revival style campus building, constructed in 1943-44. It originally provided offices and work spaces for public works employees and currently houses faculty offices for the Humanities Department, mechanical and storage spaces, and serves as a central receiving facility for the campus. Quarters G is a small-scale residential building constructed in the early-20th century and does not contribute to the district. The Fitch building's work involves modifying the masonry openings and masonry repair, installing canopies, interior alterations, as well as regrading, altering the landscape, and demolishing Quarters G. The NYSHPO concurred with USMMA's no adverse effect determination. However, as construction drawings continue to be developed, USMMA's CRM will review and resume consultation if there are any changes to the approved design.

The William S. Barstow Mansion



The William S. Barstow Mansion serves as the American Merchant Marine Museum. The former mansion and estate belonging to Barstow, is nationally significant as a reminder of the "Golden Age" of the late nineteenth and early twentieth centuries. Barstow was a founder and president of Edison Pioneers, a group of Thomas Edison's associates and early employees. In addition to his working relationship and friendship with Thomas Edison, Barstow organized and oversaw the General Gas and Electric Corporation, which at its height consisted of over 50 firms.

The William S. Barstow Mansion, which is located on the Academy's campus, but outside the district's boundary, is individually listed in the NRHP, and serves as the American Merchant Marine Museum (AMMM). In addition to serving as a museum, it is occasionally used for classes and lectures. Approximately 5,000 people visit the AMMM annually, exclusive of midshipmen, faculty and staff. Approximately one-quarter of visitors are family members of prospective or current midshipmen.

MARAD is currently working with the NYSHPO and the Advisory Council on Historic Preservation (ACHP) to finalize a Programmatic Agreement (PA) to assist the academy in meeting its Section 106 legal requirements under the NHPA. While the agreement is being finalized, MARAD has provided cultural resources training to USMMA staff.

National Historic Landmark N/S *Savannah*

MARAD owns the Department of Transportation's (DOT) only actively-managed National Historic Landmark (NHL). The Nuclear Ship *Savannah*, the world's first nuclear-powered merchant ship, was designed and constructed in the late 1950s as a signature element of President Dwight D. Eisenhower's *Atoms for Peace* initiative. *Savannah's* nuclear facilities are licensed and inspected by the U.S. Nuclear Regulatory Commission

(NRC). The ship is maintained at a layberth facility in Baltimore Maryland under a contract with GRP Silo. Inc., at their Canton Marine Terminal¹. The layberthing contract was renewed in June 2020 for a five-year term. Under the conditions of the NRC license, MARAD must complete the decommissioning (remediation, dismantlement, and disposal – a process known as DECON) of the ship’s nuclear facilities by December 2031. Since 2008, *Savannah* has been opened for periodic public access, group tours and events, and inter-governmental training exercises.

N.S. *Savannah* Stewardship

MARAD meets its primary NHL stewardship obligations while acting within the broad framework of its NRC license. *Savannah*’s exterior perimeter envelope is the licensed site boundary and the ship itself is the principal structure that contains and protects the nuclear facilities. The ship provides the support infrastructure for personnel who maintain the ship and administer the license, and consequently the ship is kept in good, clean material condition without water ingress or other forms of environmental deterioration. Repairs and maintenance are performed using traditional and customary marine techniques and materials appropriate for a ship of *Savannah*’s vintage. Renovations use like-materials wherever possible (e.g., upholstery or wall coverings), and original fabric samples are saved and spaces are documented prior to the work.

The 2017 Section 3 report described renovations to the ship’s four primary public spaces. Although no new renovations have been funded or carried out since then, numerous alterations have been made to support decommissioning activities. Wherever practical, these alterations are reversible; however, many are either semi-permanent, or relatively impracticable to reverse. In such cases, care has been taken to construct alterations in a manner that is architecturally-compatible with the existing ship fabric.

Savannah was drydocked for exterior hull inspection and maintenance over a six-month period from September 2019 through February 2020. This shipyard availability was performed at the former Philadelphia Naval Shipyard, not far from where *Savannah* was built in Camden, N.J. This marked the first time that *Savannah* has moved since 2008, and the first time the ship has transited the Delaware River since 1970. The condition of the ship’s hull is stable when compared with prior drydock inspections in 2008 and 1994. The ship’s impressed current cathodic protection system has been completely renewed, and should provide sufficient corrosion protection to the underwater hull.

¹ The layberth location has not changed since the 2017 report; the pier was sold to a new owner who assumed the layberthing contract.

N.S. *Savannah* Decommissioning

MARAD's NRC license for *Savannah*'s nuclear power plant has been in effect since 1965. MARAD removed the ship from service in 1970, and defueled it in 1971; the defueling action was later determined to be permanent. Under current regulations, a nuclear power plant must complete decommissioning and terminate its NRC license within sixty (60) years of permanent cessation of operations. For *Savannah*, the 60-year deadline is December 3, 2031.



NS *Savannah* leaving Philadelphia under tow, en route to Baltimore on February 13, 2020. Photo by Erhard Koehler.

The Consolidated Appropriations Acts for FY 2017 and FY 2018 provided MARAD with full funding to begin its Decommissioning (DECON) project. DECON is one of several decommissioning methods allowed by the NRC that defines the end of the nuclear facility's lifecycle. The NRC controls the DECON process and it is designed to meet license termination and site release requirements without restrictions. MARAD's DECON project has three defined phases, and an approximate duration of seven years; the project formally began on October 1, 2017, and is nominally expected to complete in CY 2024.

Phase I is essentially complete at the time this report was submitted. It was principally geared toward engineering and planning for the subsequent Phase II controlled dismantlement of the nuclear reactor and its primary, secondary, and auxiliary systems, structures, and components. Phase I work also modified the ship's interior structures and cargo holds to provide working space for contractors, and facilities for waste material handling and packaging. Phase III is an administrative phase in which confirmatory surveys and remediation are performed immediately before license termination.

The *Savannah* DECON will remove the NHL's significant character-defining feature; its nuclear power plant, which makes the normal outcomes of the NRC DECON-License Termination dismantlement and disposal process, and the NHPA's requirement to minimize harm to NHLs seem incompatible. MARAD has been aware of this since decommissioning planning began in earnest around 2003, and its project plans have always been guided by the following four principles:

- Wherever possible, decommissioning activities are undertaken in a manner that fosters future preservation;
- All dismantlement activities will use existing ship accesses to minimize impacts to adjacent structure;
- Whenever an option is presented or evaluated, the path that promotes preservation is taken;
- Opportunities to improve the ship concurrent with decommissioning are exercised.

DECON of a conventional land-based nuclear power plant is an inherently destructive process, especially because the land-based structures have little or no potential for future use. Sites are often restored to a green field condition. In the case of *Savannah*, however, the potential for reuse of the ship after decommissioning exists, especially considering that it served as a museum ship earlier in its career². MARAD understood early in the project that the clearest path to regulatory success in decommissioning was to emulate the process used for landside plants. The principles were articulated as this process became better understood, and application methods were developed.

As noted in the stewardship section, MARAD's primary focus is NRC license compliance; the principles, therefore, describe how landside DECON is performed on *Savannah*, with a preservation-conscious approach.

For example, the first principle – *decommissioning activities are undertaken in a manner that fosters future preservation* – reflects MARAD's license requirement to maintain and use those original systems that have applicability during decommissioning, or to install replacement systems with similar function. MARAD deliberately decided to keep the decommissioning activities within the ship's hull as much as possible, and to keep external infrastructure to the bare minimum. These were practical decisions; in the first case, it kept all activities within the NRC-licensed boundary³, thus avoiding regulatory conflicts with other federal (e.g., U.S. Coast Guard), state, and local entities that do not exist in landside DECON projects.

In the second case, by keeping offsite (pierside) requirements to the minimum necessary for safe berthing, crane service, truck loading, and parking, MARAD avoided the great expense of a commercial shipyard as a decommissioning site. The flow down from these decisions was to adapt and convert the ship's interior volume for the temporary services required for decommissioning. The infrastructure built for these purposes is permanent, or semi-permanent, and can easily be adapted for other uses once DECON is complete and the license is terminated. In particular, the life safety and fire protection systems installed to protect decommissioning workers will suit any future use of the vessel in a preservation context. The remaining principles have similar nexuses with decommissioning and preservation objectives.

MARAD is engaged in active consultation among the NRC, the National Park Service (NPS), the ACHP, and the Maryland Historical Trust acting as the Maryland State Historic Preservation Officer, and expects to enter into a Programmatic Agreement in late 2020 or early 2021, that identifies agency responsibilities and mitigation options in compliance with Section 106 of the NHPA.

² Patriots Point Naval and Maritime Museum in Mt. Pleasant, S.C. chartered *Savannah* from 1981 – 1994.

³ The ship's hull is the NRC licensed site boundary. All activities within the boundary are under the sole cognizance of the NRC.