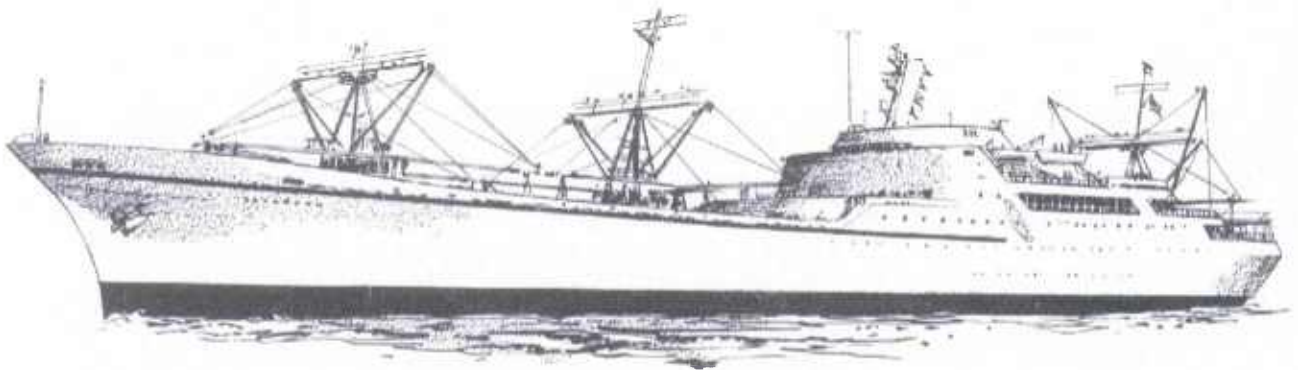




**U.S. Department of Transportation  
Maritime Administration  
Office of Ship Disposal**



***N.S. SAVANNAH***

**ANNUAL REPORT**

**2009**

**STS - 125**

Revision 0

Approved:

 *J. D. W. Kuhler*

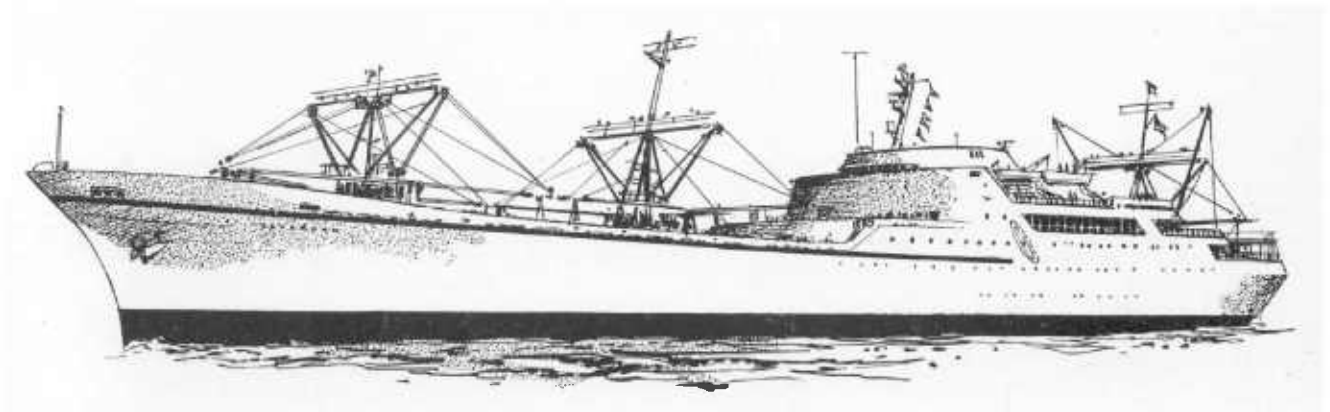
Manager, N.S. *SAVANNAH* Programs

*02/24/2010*  
Date

Prepared by:  
Sayres and Associates Corporation



**U.S. Department of Transportation  
Maritime Administration  
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## **RECORD OF REVISIONS**

Revision	Summary of Revisions
0	The original version of the 2009 Annual Report License NS-1

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## **1.0 INTRODUCTION**

In accordance with the requirements of Technical Specification 3.4.2, an annual written report shall be submitted prior to March 1 of the following calendar year.

This report is arranged into two sections. Section 2.0 provides a discussion of the nine items required by the Technical Specifications. Section 3.0 provides a discussion of other issues.

## **2.0 ITEMS REQUIRED BY TECHNICAL SPECIFICATION 3.4.1**

The report shall include the following:

- a. The status of the facility.
- b. The results of the radiation surveys and monitoring station dosimeter readings.
- c. The results of environmental sample analysis surveys.
- d. The results of quarterly intrusion alarm system checks.
- e. The amount of radioactive materials removed from the N.S. *SAVANNAH* (NSS) by releases, discharges, and shipments of radioactive waste material.
- f. A description of the principal maintenance performed on the vessel.
- g. Any unauthorized entry into radiation control areas by visitors or employees and corrective action taken to improve access control.
- h. Any degradation of one of the several boundaries which contain the radioactive materials aboard the NSS.
- i. Results of occupational exposure indicated by personal dosimetry.

### **2.1 STATUS OF THE FACILITY**

During 2009, the NSS has remained “Mothballed” per the requirements of Regulatory Guide (RG) 1.86, “Termination of Operating Licenses for Nuclear Reactors,” Reference (a). This state of protective storage was approved in Reference (b). This RG describes the now outmoded Mothballing option of protective storage.

During calendar year (CY) 2009, the ship was berthed at Pier 13, Canton Marine Terminal, 4601 Newgate Ave., Baltimore, MD.

Similar to 2007 and 2008, MARAD and contractor personnel were routinely on board the NSS during normal workdays throughout 2009. This regular attendance had the beneficial effect of improving the ship’s physical condition and improving staff proficiency with the conduct of licensed activities.

#### **2.1.1 LICENSE ACTIVITIES**

MARAD completed three significant licensing actions in 2009:

- Public meeting 11 March 2009 for Post Shutdown Decommissioning Activities Report (PSDAR), Rev. 1, Reference (c), that was submitted on December 11, 2008.
- Revision V to the Final Safety Analysis Report, May 4, 2009
- Response to NRC Orders EA-09-204 & EA-09-205 regarding Issuance of Orders Imposing Increased Controls and Fingerprinting and Criminal History Records Check Requirements on Power Reactor Licensees Undergoing Decommissioning, December 18, 2009.

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MARAD continued developing and implementing a prioritized procedure and process development program.

The USNRC conducted no facility inspections during CY 2009.

### 2.1.2 ORGANIZATION

In 2009, MARAD made no substantial changes to the organization. The individual filling the position of Nuclear Advisor left the SAVANNAH Technical Staff (STS). This position was filled in February 2010. The Facility Site Manager position is vacant but is filled on a rotating basis by STS.

### 2.1.3 REVIEW OF OTHER TECHNICAL SPECIFICATIONS REQUIREMENTS

In accordance with the NSS Technical Specification 3.6.3, the Safety Review Committee (SRC) is specifically required to review the following items with or without a formal meeting:

a. *Proposed changes to Technical Specifications.*

No changes were proposed to the Technical Specifications in CY 2009.

b. *Evaluations required by 10 CFR 50.59.*

In addition to Technical Specification review requirement by the Safety Review Committee, this paragraph is also intended to meet the reporting requirement of 10 CFR 50.59(d)(2) to provide a brief description of any changes, tests, and experiments, including a summary of the evaluation of each.

No Changes, Tests or Experiments were proposed in 2009 that would require a 50.59 evaluation.

c. *Proposed changes or modifications to a Radiological Controlled Area entry alarm system or reactor containment vessel system.*

Changes to the Alarm System were reviewed in 2009. As of 31 December 2009, installation was not complete. The existing security system is functional.

There were no changes to a reactor containment vessel system.

d. *Evaluations of substantive changes to the results of radiological surveys.*

There were no substantive changes to the results of radiation surveys.

e. *Procedures and revisions per Technical Specification 3.5.*

Per Technical Specification 3.5, procedures and their revisions were reviewed prior to approval.

f. *Evaluations of reported violations of Technical Specifications.*

There were no TS violations during the reporting period.

g. *Evaluations of reportable events per Technical Specification 3.4.3.1.*

There were no reportable events during the reporting period.

h. *Evaluations of deviations allowed by Technical Specification 3.7.1.7.*

All deviations were reviewed prior to implementation. The following limited duration deviations were used as needed in the reporting period:

- Alarm Systems – Testing, Maintenance (Troubleshooting / Repair) and Modification.
- Loss of Electrical Power



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- i. *Audits and self assessments to verify the effectiveness of the Decommissioning Quality Assurance Plan.*

Self assessments were performed in the following functional areas in the reporting period:

- Surveillances
- Radiation Safety Program
- Security/Radiological Controlled Area Boundaries
- Procedures and Manuals
- Procedure Control

- j. *Annual reports to the NRC.*

The CY 2008 Annual Report was reviewed prior to its submittal on February 27, 2009.

**2.1.4 DECOMMISSIONING PLANNING ACTIVITIES**

Decommissioning planning during the reporting period focused on facility and administrative activities necessary to bring the NSS into conformance with SAFSTOR requirements. The underlying intent is described more fully in reference (c).

**2.1.5 SAVANNAH EMERGENCY RADIOLOGICAL ASSISTANCE TEAM (SERAT)**

SERAT was trained in September 2009. All local responders were retrained during 2009. All SERAT members are located within a 2-hour response radius of the ship's current location.

**2.2 RADIATION SURVEYS AND MONITORING STATION DOSIMETER READINGS**

A routine radiological survey program continued to be followed in 2009. Radiological survey measurements were taken in various non-Radiological Controlled Areas and Radiological Controlled Area. There were no significant changes found in 2009. All readings in non-Radiological Controlled Areas were insignificant as compared to background radiation levels.

**2.2.1 2009 RADIATION SURVEY RESULTS IN RADIOLOGICALLY CONTROLLED AREAS**

Area	General Area Radiation levels $\mu\text{R/hr}$ (micro-R/hr)	Highest Radiation Level $\mu\text{R/hr}$ (micro-R/hr)	General Area Contamination Level (DPM/100cm <sup>2</sup> )	Highest Contamination Level (DPM/100cm <sup>2</sup> )
Reactor Compartment Cupola Level	1.0 – 4.0	10	<1000	<1000
Reactor Compartment Upper Level	1.0 – 1.5	15 at open hatch to Reactor vessel	<1000	<1000
Reactor Compartment Forward Middle Level	1.5	1.5	<1000	<1000
Reactor Compartment Aft Middle Level	1 - 2.5	10 on hose	<1000	<1000

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Area	General Area Radiation levels $\mu\text{R/hr}$ (micro-R/hr)	Highest Radiation Level $\mu\text{R/hr}$ (micro-R/hr)	General Area Contamination Level (DPM/100cm <sup>2</sup> )	Highest Contamination Level (DPM/100cm <sup>2</sup> )
Reactor Compartment Lower Level	40 - 4000	120,000 on contact with pipe 8 ft in overhead; 10,000 @ 30 cm.	<1000	4041 inside drum
Containment Vessel 1 <sup>st</sup> Level	150 - 450	2500 along Steam Drum	<1000	<1000
Containment Vessel 2 <sup>nd</sup> Level	150 - 2000	4000 - 5000 along Steam Drum	<1000	<1000
Containment Vessel 3 <sup>rd</sup> Level	200 - 4000	12000 on contact with Steam Generator; 8000 @30cm	<1000	<1000
Containment Vessel 4 <sup>th</sup> Level	1000 - 4000	80,000 on contact with pipe; 10,000 @30cm	<1000	<1000
Port Charge Pump Room	2.0 - 40	150 to 250 on contact with pump suction line	<1000	<1000
Starboard Charge Pump Room	2.5- 25	100 to 180 on contact with pump suction line	<1000	<1000
Hot Chemistry Lab	1.7	2.5 on contact with sink drain trap shielding. 25 on contact with trap.	<1000	<1000
Health Physics Lab	2.5 - 3.5	30 on contact with Steam Generator Primary Side Samples	<1000	<1000

Area	General Area Radiation levels $\mu\text{R/hr}$ (micro-R/hr)	Highest Radiation Level $\mu\text{R/hr}$ (micro-R/hr)	General Area Contamination Level (DPM/100cm <sup>2</sup> )	Highest Contamination Level (DPM/100cm <sup>2</sup> )
Port Stabilizer Room	1.0 – 4.5	6.0 grate level	<1000	<1000
Port Booster Pump Area	4.0 - 30	1000 on contact with piping with 30cm readings up to 150.	<1000	<1000
Starboard Stabilizer Room	.05 - 1.5	1.5 lower level off walkway	<1000	<1000
Stateroom B-1 Rad Waste Storage Area	2.0 - 5.0	8.0	<1000	<1000
Fan Room B Deck	1.0 - 2.0	2.0	<1000	<1000
Cold Chemistry Lab Area C Deck	1.5 - 6.0	26 on contact with the floor	<1000	<1000
Sample Room D-Deck	20 - 500	3200 on contact with overhead line	<1000	5139 inside sample sink
Gas Absorber Room D-Deck	4.0 - 60	450 on Suction Strainer	<1000	<1000
Cargo Hold D Deck	<1.0 – 6.0	150 on contact behind aft deck plates along Port side	<1000	<1000
Hold Deck Aft of Reactor space port side	5.0 - 7.0	50 on contact with piping under the deck plate	N/A	N/A

### 2.2.2 MONITORING STATION DOSIMETER RESULTS

Forty (40) permanently placed thermoluminescent dosimeter (TLD) monitoring stations are dispersed throughout the non-radiological controlled areas of the NSS and in those areas of the NSS that are routinely occupied. Fixed point radiation surveys are performed during TLD change outs. Results from the TLDs from all monitoring stations indicated that readings were insignificant as compared to the background radiation levels. No fixed point radiation dose rate exceeded 5  $\mu\text{R/hr}$  (micro-R/hr).

### 2.3 ENVIRONMENTAL SAMPLE ANALYSIS SURVEYS

Environmental water and sediment samples were taken adjacent to the ship at various times during the calendar year as required by TS and potential ship's movement to new piers.

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The environmental sample results indicate that the radiological conditions in the environment surrounding NSS are insignificant as compared to expected background conditions. Therefore, based on the results of the radiological environmental monitoring program, NSS operations did not have any adverse effects on the health and safety of the public or on the environment in 2009.

**2009 RADIOLOGICAL ENVIRONMENTAL SAMPLING RESULTS**

<b>Sample Location</b>	<b>Sample Date</b>	<b>Type of sample</b>	<b>Co-60</b>	<b>Cs-137</b>
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Fwd)	05/20/2009	Sediment (A)	7.84E-02 pCi/g (B)	1.76E-01 pCi/g (C)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Aft)	05/20/2009	Sediment (A)	5.11E-02 pCi/g (B)	1.25E-01 pCi/g (C)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Mid)	11/19/2009	Sediment (A)	5.89E-02 pCi/g (B)	1.69E-01 pCi/g (C)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Aft)	11/19/2009	Sediment (A)	6.31E-02 pCi/g (B)	1.02E-01 pCi/g (C)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Aft)	05/20/2009	Water	2.46E+00 pCi/L(B)	3.31E+00 pCi/L (B)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Fwd)	05/20/2009	Water	3.25E+00 pCi/L(B)	3.06E+00 pCi/L(B)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Mid)	11/19/2009	Water	1.62E+00 pCi/L(B)	1.70E+00 pCi/L(B)
Pier #13, Canton Marine Terminal, Baltimore, MD NSS Port Side (Aft)	11/19/2009	Water	1.80E+00 pCi/L(B)	1.70E+00 pCi/L(B)
New Pier at Vane Brothers, Baltimore, MD (background information)	05/20/2009	Sediment (A)	6.32E-02 pCi/g (B)	5.85E-02 pCi/g (B)
STBD Side (Aft) Pier 13, Canton Marine Terminal, Baltimore, MD (background information)	05/20/2009	Sediment (A)	5.29E-02 pCi/g (B)	8.61E-02 pCi/g (C)
STBD Side (Mid) Pier 13, Canton Marine Terminal, Baltimore, MD (background information)	05/20/2009	Sediment (A)	5.83E-02 pCi/g (B)	7.75E-02 pCi/g (B)
STBD Side (Fwd) Pier 13, Canton Marine Terminal, Baltimore, MD (background information)	05/20/2009	Sediment (A)	7.10E+00 pCi/g (B)	7.46E-02 pCi/g (B)
Head of Pier 13, Canton Marine Terminal, Baltimore, MD (background information)	05/20/2009	Sediment (A)	3.47E-02 pCi/g (B)	6.23E-02 pCi/g (B)
Canton Fishing Pier, Baltimore MD (background information)	05/20/2009	Sediment (A)	6.14E-02 pCi/g (B)	9.42E-02 pCi/g (C)
Canton Street Bulkhead, Baltimore, MD (background information)	05/20/2009	Sediment (A)	6.59E-02 pCi/g (B)	9.25E-02 pCi/g (B)

**Table Data Notes**

- (A) Sediment samples are reported on a dry weight basis and are decay corrected to the Sample Collect date
- (B) Calculated MDA as an a-posteriori value at the 95% confidence Level
- (C) Results are statistically positive at the 95% Confidence level (Activity is greater than or equal to the two sigma uncertainty)

#### **2.4 QUARTERLY INTRUSION ALARM SYSTEM CHECKS**

Routine security surveillances were conducted as required by Technical Specification 3.7.2.1 and the Key and Seal log was reviewed on a quarterly basis. No deficiencies were noted.

#### **2.5 RADIOACTIVE MATERIALS REMOVED BY RELEASES, DISCHARGES AND WASTE SHIPMENTS**

No radioactive materials were removed from the ship as described below:

##### **2.5.1 RELEASES**

There were no releases.

##### **2.5.2 DISCHARGES**

There were no discharges.

##### **2.5.3 SHIPMENTS**

There were no shipments.

#### **2.6 PRINCIPAL MAINTENANCE AND RELATED ACTIVITIES**

The major maintenance activities of CY 2009 continued to focus on routine preventative maintenance, preservation of the ship's structural integrity, and restoration of ship systems and equipment necessary for husbanding the ship and for its long-term retention. In addition, the following significant discrete activities were performed:

##### **2.6.1 AMERICAN BUREAU OF SHIPPING (ABS) SURVEYS**

At the end of 2008 there remained several outstanding requirements necessary to complete the ABS classification surveys. Most significant among these was the survey and inspection of six (6) double bottom tanks within the Reactor Compartment (RC) boundary. The tanks include the RC Port & Starboard Salt Water (SW) Ballast Tanks, the Fresh Water Shield Tank (FWST), the RC Void, and Contaminated Water Tanks, PD-T5 and PD-T6 at the forward end of the compartment. As planned, these were the only innerbottom tanks not inspected during the 2008 drydocking. The tank contents were sampled in early 2009 prior to survey (see item 4.1 regarding Freshwater Shield Tank tritium). All sampling activities and tank surveys were conducted using work control processes defined in the NSS Radiation Protection Plan. The attending ABS surveyor was trained and briefed prior to entry. The tank surveys were satisfactorily completed; with good structural and coating systems conditions noted.

Other classification surveys completed during the year were not related to primary hull structure.

##### **2.6.2 ABS INTERIM CLASSIFICATION CERTIFICATE**

The Interim Classification Certificate was issued June 29, 2009. Pending final review by the Ship Classification Committee, the NSS has been restored to hull classification for the first time since 1984. Classification provides competent independent oversight of the conventional ship and the MARAD activities and practices employed in its maintenance and repair.

##### **2.6.3 FIRE AND SMOKE DETECTION SYSTEM**

Installation of a complete marine-grade (US Coast Guard type approved) Fire and Smoke Detection System, consisting of speaker strobe devices, smoke and heat detectors, pull stations, panels (primary and remote), and ancillary electrical components and wiring.

**2.6.4 NEW ELECTRICAL SHORE POWER SUPPLY CABLES**

The worn electrical shore power cable that was hooked up upon vessel's arrival at layberth has been replaced with a new 800amp cable that was obtained from the Maritime Administration's Suisun Bay Reserve Fleet facility.

**2.6.5 UNDERWATER HULL SURVEY**

An underwater hull inspection survey was accomplished on July 22, 2009. The overall condition of the coating system was found to be good, with no breakdown. Moderate marine growth (1/2 inch to 1 inch) was noted to be accumulating on the vessel's hull from the waterline to a depth of approximately 10 feet over the length of the vessel.

**2.6.6 INVESTIGATION OF RAINWATER INGRESS INTO REACTOR SPACE VENTILATION (RSV) SYSTEM**

Staff investigated water in-leakage in the overhead A Deck starboard passageway by the forward passenger staterooms and discovered significant ventilation duct degradation.

The investigation verified that water in-leakage was from the RSV supply-air housing that is situated on the Promenade Deck, starboard side of the reactor hatch. The housing is deteriorated at the deck edge.

The RSV system was deactivated in the mid-1970's, and serves no active function. It is not planned to be restored to operation.

This in-leakage is probably the cause of water in the Reactor Compartment Lower Level (RCLL) aft sump (previous NRC concern since about 1992). It appears that this in-leakage provided a pathway which allowed water into the ventilation system and the Reactor Compartment Areas. The heavy deterioration of the ductwork is strong evidence that this condition has existed for many years and possibly before MARAD resumed custody of the ship in 1994.

Ship's force installed temporary blanks in the RSV ductwork to prevent further water in-leakage and system degradation. Permanent structural repairs are scheduled in FY 2010. Other Ventilation Unit Housings on the Promenade deck will be inspected to determine if similar conditions exist.

Forward and Aft RCLL Sump levels are monitored quarterly.

**2.6.7 COMPLETION OF THE B DECK 6 HOLD OFFICE RESTORATION PROJECT**

Starting in 2008, a severe asbestos condition prompted the gutting of 10 staterooms and a conference center that had originally been retrofitted to the ship in 1963. This complex was determined to be suitable to support STS operations, and was renovated in 2008-2009 to support all staff on the ship.

**2.6.8 RECORDS MANAGEMENT STORAGE FILES UPGRADED**

A set of Hi-Density movable shelving was procured and installed in the Records Vault located on port side "C" deck.

**2.7 *UNAUTHORIZED ENTRY INTO RADIATION CONTROL AREAS AND CORRECTIVE ACTIONS TAKEN TO IMPROVE ACCESS CONTROL***

No unauthorized entries were made into any Radiological Controlled Area in 2009.

2.7.1 EVENT DISCUSSION

None

2.7.2 IMPROVEMENTS TO ACCESS CONTROL

None

**2.8 INSPECTION OF BOUNDARIES CONTAINING RADIOACTIVE MATERIALS**

The annual inspection required by Technical Specification 3.7.6 was conducted in November 2009.

There was no notable change in the condition of the primary and auxiliary systems since the last inspection in December 2008.

**2.9 SUMMARY OF 2009 OCCUPATIONAL EXPOSURE**

As a result of the NSS being in the Mothballed state of protective storage, no individual is expected to receive in one year from sources external to the body, a dose in excess of 10% of the limits specified in 10 CFR 20.1201. Fifty-nine (59) individuals were monitored with TLD and self reading dosimetry during their entries into radiological controlled area. All personnel received zero dose from occupational sources during the monitoring period. Therefore, MARAD has no requirement under 10 CFR 20.1502, "Conditions requiring individual monitoring of external and internal occupational dose" to reasonably anticipate that there is a need to "monitor exposure to radiation and radioactive materials at levels sufficient to demonstrate compliance with the occupational of dose limits." Likewise, MARAD has no requirement under 10 CFR 20.2106, "Records of individual monitoring results" to maintain records of doses when an individual is not required to be monitored.

**3.0 OTHER NRC REPORTS**

**3.1 10 CFR 50.59 BIENNIAL REPORT**

Historically, the Biennial Summary Report has been included in each Technical Specification Annual Report. No 10CFR50.59 Evaluations were completed in 2009.

Many Safety Evaluation Screenings were performed. An example is the Safety Evaluation Screening performed on the modification to prevent water intrusion into the Reactor Space Ventilation System from the cupola area and at the topside ventilation intake enclosure house on the promenade deck. This screening determined that no 10CFR50.59 Evaluation was required.

**3.2 SUMMARY OF TECHNICAL SPECIFICATION DEVIATIONS**

One new Technical Specification Deviation was approved for Loss of Electrical Power. This deviation describes how the underlying intent of Technical Specification 3.7.1.5 is met when electric power is secured for any reason.

**3.3 10 CFR 50.54W INSURANCE ANNUAL REPORT**

The regulations require each power reactor licensee to obtain insurance available at reasonable costs and on reasonable terms from private sources or to demonstrate to the satisfaction of the NRC that it possesses an equivalent amount of protection covering the licensee's obligation. MARAD adheres to the federal rules of self-insurance as a matter of established policy.

## **4.0 SIGNIFICANT MARAD ISSUES**

### **4.1 UNEXPECTED TRITIUM CONCENTRATIONS DETECTED IN THE FRESH WATER SHIELD TANK (FWST)**

As noted in paragraph 2.6.1, sampling of the water in the FWST was conducted prior to its survey by the ABS. The sample results revealed unexpected concentrations of tritium in the water at concentrations that were/are significantly lower than the drinking water limits specified in EPA regulations. These low concentrations and the resulting doses are typically indistinguishable from normal background radiation doses received by all members of the public. Although tritium is present in the environment as a consequence of fallout from atmospheric nuclear tests in the 1940's through 1960's, it can also be a byproduct of operations of a nuclear reactor. The source of the tritium (environmental or byproduct) in the FWST could not be determined conclusively; however, it is suspected to be environmental because the FWST system is separated from other primary and auxiliary systems including suction and fill piping. An independent sampling and assessment was performed by a qualified radiological protection firm, with the conclusion that there are no increased radiological safety impacts to the public, the crew and staff, or the environment. These events took place in the late February to mid-March timeframe. Some months later, a 1981 South Carolina radiological survey report was discovered that identified the presence of tritium contamination in the FWST. The survey report provides no further explanation for the source (or suspected source) of the contamination.

### **4.2 PUBLIC EVENTS AND VISITATION**

During 2009 the *SAVANNAH* played host to a number of public events and large group tours for a variety of educational, professional and celebratory purposes. Access controls and procedures were modified and refined to incorporate lessons learned after each event, leading to the major 50<sup>th</sup> anniversary milestone commemoration of the ship's christening and launching. A two-day celebration and public open house was hosted on the weekend of July 18-19; this marked the first time since the *SAVANNAH* was removed from the Patriots Point Naval and Maritime Museum that the ship was opened to the general public; attendance was estimated at 2,000 for the weekend. Total visitation for the year was estimated at slightly in excess of 3,000 persons. Significant events of the year included the following:

- National Maritime Day; May 22.
- American Nuclear Society DC Section tour, Boy Scout Troop 35 tour and Nuclear Science Merit Badge workshop; May 23.
- National Historic Landmark Stewards Association; annual meeting onboard NSS; May 25.
- Maine Maritime Academy / *STATE OF MAINE* port call and alumni reception; June 21-24.
- USMMA Plebe Reception, June 29.
- *SAVANNAH* 50<sup>th</sup> Anniversary of Christening and Launching; July 18-19.
- Steamship Historical Society of America, Delaware Valley Chapter tour, July 19.
- Reactor site training evolution for CIA WINPAC; August 20.
- Hampton Roads Naval and Maritime Museum tour; September 19.
- Wreaths Across America post-ceremony luncheon; December 12.

### **4.3 HISTORIC STEWARDSHIP**

As a National Historic Landmark (NHL) site, MARAD maintains a continuous focus on its historic stewardship responsibilities when conducting activities on the NSS site. All work on the ship, whether radiological or not, is sensitive to maintaining the historic fabric and appearance of the ship.



**SAVANNAH Technical Staff**  
**STS - 125, Annual Report 2009, Revision 0**

Decommissioning activities are subject to the provisions of the National Historic Preservation Act of 1966, as amended, and MARAD includes such planning and consultation as is necessary to ensure that decommissioning activities are in compliance with all applicable historic preservation statutory and regulatory requirements, as well as the relevant executive orders. MARAD's Federal Preservation Officer (FPO) is engaged in planning and activities on the site. In 2009 MARAD responded to the National Park Service (NPS) request to NHL owners and stewards to provide comprehensive updates to the online NHL status database.

## **5.0 REFERENCES**

- a. Regulatory Guide 1.86, Termination of Operating Licenses for Nuclear Reactors, June 1974
- b. Letter from Mr. Robert W. Reid (NRC) to U.S. Department of Commerce, Maritime Administration, dated May 19, 1976, No Title [Issuance of Amendment 8, Possession-only License]
- c. N.S. *SAVANNAH* Post Shutdown Decommissioning Activities Report (PSDAR), Revision 1, submitted December 11, 2008 under cover letter from Mr. Erhard W. Koehler (MARAD) to U.S. Nuclear Regulatory Commission.