

November 26, 2003

U. S. Maritime Administration
ATTN: Joseph Seelinger, Deputy Director
Office of Ship Operations
Department of Transportation
MAR-610.1
Washington, D.C. 20590

SUBJECT: NRC INSPECTION REPORT NO. 50-238/2003-201

Dear Mr. Seelinger:

This letter refers to the inspection conducted on November 13 and 14, 2003, at the James River Reserve Fleet office near Ft. Eustis, Virginia, and on board the N.S. Savannah. The inspection included a review of activities authorized under NRC license NS-1. The enclosed report presents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concern or noncompliance of NRC requirements were identified. No response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this inspection, please contact Stephen Holmes at 301-415-8583.

Sincerely,

/RA/

Patrick M. Madden, Section Chief
Research and Test Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-238
License No. NS-1

Enclosure: NRC Inspection Report No. 50-238/2003-201
cc w/encl.: Please see next page

N. S. Savannah

Docket No. 50-238

cc:

Mr. Erhard W. Koehler
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Test, Research, and Training
Reactor Newsletter
University of Florida
202 Nuclear Sciences Center
Gainesville, FL 32611

November 26, 2003

U. S. Maritime Administration
ATTN: Joseph Seelinger, Acting Director
Office of Ship Operations
Department of Transportation
MAR-610.1
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TEMPLATE No.: NRR-106

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DATE	11/ 22 /2003	11/ 26 /2003	11/ 26 /2003

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U. S. NUCLEAR REGULATORY COMMISSION

Docket No.	50-238
License No.	NS-1
Report No.	50-238/2003-201
Licensee:	U. S. Maritime Administration Washington, D. C. 20509
Facility:	N.S. Savannah
Location:	James River Reserve Fleet Ft. Eustis, VA
Dates:	November 13 and 14, 2003
Inspector:	Stephen W. Holmes, Reactor Inspector
Approved by:	Patrick M. Madden, Section Chief Research and Test Reactors Section New, Research and Test Reactors Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

This routine, announced inspection included on site review of various aspects of the licensee's programs concerning organization and staffing, maintenance, emergency preparedness, physical security, radiation protection, surveillance, and transportation activities as they relate to the licensee's Class III Research Reactor. The licensee's programs were directed toward the protection of public health and safety and were in compliance with NRC requirements.

Organization and Staffing

- Organization, Staffing, Reporting, and Record keeping met Technical Specifications Sections 3.1, 3.2, and 3.4 requirements.

Review, Audit, and Design Change Functions

- The Review and Audit Committee performed their review and oversight functions as required by Technical Specifications Sections 3.5 and 3.6. No Technical Specifications or 10 CFR 50.59 facility design changes had been performed since the last inspection.

Maintenance Activities

- The maintenance activities were consistent with the Technical Specifications and licensee procedures.

Surveillance

- The program for surveillances and confirmations was being implemented in accordance with Technical Specifications Sections 3.4 and 3.7.1 and licensee procedures.

Emergency Preparedness

- U. S. Maritime Administration is near having support and equipment in place to meet emergency preparedness requirements.

Radiation Protection Program

- The radiation protection program being implemented by the licensee satisfied regulatory requirements.

Transportation Activities

- No byproduct was transferred to or from the N.S. Savannah.

Physical Security

- The physical protection features of the Motorola Radio System Remote Alarm System, the equipment, procedures, and access control implementation, met the Port Operating Plan for James River Reserve Fleet, Virginia, MASTS-106 and Technical Specifications Section 3.3 requirements, and satisfied James River Reserve Fleet procedures.

Effluents and Environmental Monitoring

- No liquid or gaseous effluent has been released. Doses to the public were well below 10 CFR 20.1301 (a) limits. Technical Specifications Sections 3.7.2.4 and 3.7.2.5 environmental requirements were met.

REPORT DETAILS

Summary of Plant Status

The N. S. Savannah (NSS) was removed from service and mothballed in 1970. A "Possession Only" license was issued as Amendment No. 8 dated, May 19, 1976. There is no reactor fuel on board and all primary and secondary systems have been drained of fluids. All radioactive resins have been removed from the ship and any remaining radioactive material is contained within the reactor vessel and its internal components. The ship is currently moored in the James River, Virginia. It is secured in place by multiple anchors and mooring wire ropes. Access to the vessel and to the restricted areas of the vessel is being provided by James River Reserve Fleet (JRRF) personnel. Annual radiation surveys are being completed by a contractor working for the U. S. Maritime Administration (MARAD). The licensee was maintaining the facility as required by the Technical Specifications (TS).

1. Organization, Reporting, and Records

a. Inspection Scope (Inspection Procedure [IP] 40755)

The inspector interviewed licensee staff and reviewed the following to ensure staffing, reporting, and record keeping requirements specified in TS Sections 3.1, 3.2, and 3.4 were being met, the inspector reviewed:

- TS for the NSS, Amendment No. 12, dated May 29, 1994
- administrative controls and management responsibilities specified in TS Sections 3.1, 3.2, and 3.4.
- organization and staffing for the NSS
- Port Operating Plan (POP) for JRRF, Virginia, MASTS-106, Revised June 14, 1996
- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001
- Scope of Work and Services, Radiological Surveillance for the NSS, FY 2004

b. Observations and Findings

The management structure consisted of the Senior Technical Advisor (STA) for MARAD and health physics (HP) contractor personnel. The inspector verified that these positions were filled, interviewed the STA, reviewed qualifications, and determined that they were knowledgeable of their duties and responsibilities as required by TS Sections 3.1 and 3.2. MARAD and JRRF staff provided day to day support for the NSS. The inspector determined that no changes had occurred in the organization since last inspected (refer to NRC Inspection No. 50-238/2001-201, ADAMS Accession No. ML10390227).

A review of the quarterly structural surveys showed that they were being completed as required by TS Section 3.2 and problems, if any, were being documented and acceptably addressed. Review of records verified that management responsibilities were administered and records maintained as required by TS Sections 3.1 and 3.2.

The 2000, 2001, and 2002 annual reports summarized the required information and were issued at the frequency specified in TS Section 3.4.1. No special reports were submitted pursuant to TS Section 3.4.2.

c. Conclusions

Organization, Staffing, Reporting, and Record keeping met TS Sections 3.1, 3.2, and 3.4 requirements.

2. Review, Audit, and Design Change Functions

a. Inspection Scope (IP 40755)

The inspector reviewed the following to ensure that the licensee had established and conducted reviews and audits as required in TS Sections 3.5 and 3.6 and to decide whether modifications to the facility, if any, were consistent with 10 CFR 50.59:

- TS for the N.S. SAVANNA, Amendment No. 12, dated May 29, 1994
- TS and 10 CFR 50.59 changes
- Review and Audit Committee (RAC) Annual meeting minutes from February 2001 to present
- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001

b. Observations and Findings

Review of the RAC membership and meeting schedule confirmed they met TS Sections 3.6.1 and 3.6.4 requirements for quorum and frequency. The inspector reviewed the minutes of last three RAC meetings and confirmed that the topics considered were as stipulated in TS Section 3.6.2. The RAC, as required by TS Section 3.5, reviewed and approved new procedures and radiological safety significant revisions to existing ones. As required by TS Section 3.6.3, the RAC is also responsible for reviewing facility 10 CFR 50.59, TS, and license change requests. No TS, license, or 10 CFR 50.59 facility design changes had been performed since the last inspection.

The RAC conducted audits and reviews of the facility as required by TS Section 3.6.2 and licensee procedures. The inspector found the content of the reviews and audits to be consistent with the TS.

The inspector determined that the RAC provided guidance, direction, and oversight for the facility as required by TS Sections 3.5 and 3.6.

c. Conclusions

The RAC performed their review and oversight functions as required by TS Sections 3.5 and 3.6. No TS or 10 CFR 50.59 facility design changes had been performed since the last inspection.

3. Maintenance Activities

a. Inspection Scope (IPs 40755 and 69001)

The inspector interviewed licensee staff and reviewed the following to ensure that activities at the site were proceeding as outlined in the TS and licensee procedures:

- TS for the NSS, Amendment No. 12, dated May 29, 1994
- POP, Revised June 14, 1996
- Monthly Cathodic Protection (CP) readings from January 2001 to present
- Monthly Dehumidifier (DH) readings from January 2001 to present
- Diving Inspection, Paint, CP and Marine Growth report dated February 4, 2002
- Diving Inspection, Paint, CP and Marine Growth report dated February 18, 2003
- NSS/MH-1A Quarterly Structural Surveys from January 2001 to present
- Annual HP Survey, dated February 13, 2003
- Annual HP Survey, dated March 4, 2002
- Annual HP Survey, dated March 6, 2001
- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001
- maintenance logs and records

b. Observations and Findings

Under the current license no power operations are authorized. At the time of the inspection JRRF personnel were on the vessel performing maintenance and surveillance activities. Through interviews, observations, and record reviews the inspector noted that all required maintenance activities were being accomplished as required, with many being performed more frequently than required. Information on the operational status of the facility was documented as required by TS Section 3.2 and licensee procedures. Use of maintenance and repair records satisfied procedural requirements. Observed activities were focused on maintaining the integrity and security of the facility, performing required health physics operations, and fulfilling TS maintenance and monitoring requirements.

c. Conclusions

The maintenance activities were consistent with the TS and licensee procedures.

4. Surveillance

a. Inspection Scope (IP 40755)

The inspector interviewed licensee staff and reviewed the following to ensure that surveillances and verifications were being completed as required by TS Section 3.4 and 3.7.1 and licensee procedures:

- TS for the NSS, Amendment No. 12, dated May 29, 1994

- MARAD Procedure No. Layup-IS-002, Procedure for Inspection and Survey of Primary and Secondary Systems in the Laid-Up Condition, dated March 14, 2001
- Scope of Work and Services, Radiological Surveillance for the NSS, FY 2004
- Monthly CP readings from January 2001 to present
- Monthly DH readings from January 2001 to present
- Diving Inspection, Paint, CP and Marine Growth report dated February 4, 2002
- Diving Inspection, Paint, CP and Marine Growth report dated February 18, 2003
- NSS/MH-1A Quarterly Structural Surveys from January 2001 to present
- Annual HP Survey, dated February 13, 2003
- Annual HP Survey, dated March 4, 2002
- Annual HP Survey, dated March 6, 2001
- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001
- associated surveillance and data records from January 2001 to present

b. Observations and Findings

The surveillances for the NSS are to maintain the vessel in an acceptable condition, to ensure containment of the residual radioactive material, and to protect the safety of the JRRF staff and the public. The inspector reviewed, monthly, quarterly, semiannual, annual and other periodic checks and verifications for all TS-required surveillances. The surveillances were being completed and documented as required by TS Sections 3.4 and 3.7.2 and licensee procedures. Through interviews and record reviews the inspector noted that many surveillances were performed more frequently than required. All recorded results were in close agreement with the previous surveillance results. The records and logs reviewed were accurate, complete, and were being maintained as required. All values checked by the inspector satisfied the limits/parameters listed in the procedure or checklist.

c. Conclusions

The program for surveillances and confirmations was being implemented in accordance with TS Sections 3.4 and 3.7.1 and licensee procedures.

5. Emergency Preparedness

a. Inspection Scope (IP 40755)

The inspector interviewed licensee staff and reviewed selected aspects of the following to ensure the NSS emergency response capability satisfied TS Section 3.1 requirements:

- TS for the NSS, Amendment No. 12, dated May 29, 1994
- POP, Revised June 14, 1996
- JRRF Qualifications
- emergency response facilities, supplies, equipment, and instrumentation

b. Observations and Findings

Although a NRC-approved emergency plan is not required, TS Section 3.1 requires MARAD to have a health physicist on duty or on call within two hours and to provide an emergency radiological assistance team (ERAT) in the event of radiological emergencies. MARAD has been, as stated in their reply to violation (VIO) 50-238/2001-201-01, pursuing an entity to provide this support. The inspector confirmed that they have solicited bids from at least three entities in the surrounding area that can provide both the HP and ERAT support. The Director, Office of Ship Operations stated that one company would be contracted to provide the required services in the near future.

Interviews with staff and review of training records showed that at least nine are Hazardous Waste Site Operations trained with a number of them also having Advance Environmental Management Training. Two emergency kits have been purchased, one for storage on the NSS and the other for the JRRF office. The inspector contacted the Ft. Ustus radiological supervisor and confirmed that they have radiological survey instruments and personnel who could use them in an emergency if no other response team was available.

c. Conclusions

MARAD is near having support and equipment in place to meet emergency preparedness requirements.

6. Radiation Protection Program

a. Inspection Scope (IPs 40755 and 69001)

The inspector interviewed licensee staff and reviewed the following to ensure that the requirements of 10 CFR Part 20, TS, and the licensee's Radiation Protection Program (RPP) were being met:

- TS for the NSS, Amendment No. 12, dated May 29, 1994
- MARAD Procedure No. Layup-IS-002, Procedure for Inspection and Survey of Primary and Secondary Systems in the Laid-Up Condition, dated March 14, 2001
- Scope of Work and Services, Radiological Surveillance for the NSS, FY 2004
- Diving Inspection, Paint, CP and Marine Growth report dated February 4, 2002
- Diving Inspection, Paint, CP and Marine Growth report dated February 18, 2003
- NSS/MH-1A Quarterly Structural Surveys from January 2001 to present
- Annual HP Survey, dated February 13, 2003
- Annual HP Survey, dated March 4, 2002
- Annual HP Survey, dated March 6, 2001
- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001
- associated surveillance and data records from January 2001 to present
- RSC meeting minutes from January 2001 through the present
- Personnel dosimetry records from June 2000 to present

b. Observations and Findings

(1) Radiation Protection Program

Since MARAD contracts out for much of its health physics program, the RPP is a consolidation of portions of other RPPs. These consist of Ft Eustis's occupational dosimetry program, their contract HP's survey and instrument calibration program, the US Army Corps of Engineers scope of work requirements, and their own internal plans and procedures. The RPP was reviewed at least annually as required by 10 CFR 20.1101(c). This review and oversight were provided by the RSC as required by TS Section 3.6.2.

(2) Postings and Notices

During tours, the inspector observed that caution signs, postings, and controls on the NSS were acceptable for the hazards involving radiation and contaminated areas and were implemented as required by 10 CFR 20, Subpart J. Through observations of and interviews with licensee and JRRF staff the inspector confirmed that personnel complied with the signs, postings, and controls. No unmarked radioactive material was detected in the facility. The inspector confirmed that current copies of NRC Form-3 and notices to workers were posted in the facility as required by 10 CFR Part 19.

(3) Surveys

The inspector audited annual contamination and radiation surveys done since January 2001. They were performed and documented as required by the TS Section 3.2.1 and the scope of work services survey procedures. The inspector's review of the survey records confirmed that contamination in the facility was extremely low. Most readings were less than the minimum detectable activity of 9 dpm /100cm² for alpha and 48 dpm /100cm² for beta. None were greater than 100 dpm /100cm². The inspector determined that the survey program satisfied 10 CFR 20.1501(a) and TS Section 3.7.2 requirements.

(4) Dosimetry

The dosimetry program requirements and procedures had not changed since the last inspection. MARAD used dosimetry supplied and serviced by the base radiological safety office. The base vendor was National Voluntary Laboratory Accreditation Program-accredited. The inspector confirmed that dosimetry was being issued to staff and visitors as required by 10 CFR 20.1502. All results showed no exposures above background and thus met 10 CFR 20.1201 limits.

(5) Radiation Monitoring Equipment

Since the survey and environmental sampling was provided by a contractor, the calibration and periodic checks of the portable survey meters, radiation monitoring instruments, and laboratory counters and analyzers were handled by the contractor.

The inspector confirmed that the Scope of Work and Services, Radiological Surveillance contract required the HP to be a Certified Health Physicist. It also required that the equipment and procedures used meet nationally recognized standards, such as Method RP710, Laboratory Method for Gross Alpha and Beta Activity Determination, from the DOE Methods for Evaluating Environmental and Waste Management Samples, DOE/EM-0089T.

The inspector verified with the contract HP that his instrument calibrations met 10 CFR 20.1501(b) requirements, and the American National Standards Institute N323 "Radiation Protection Instrumentation Test and Calibration" or the instrument's manufacturers' recommendations. The inspector also verified that the calibration and check sources used were traceable to the National Institute of Standards and Technology and that the sources' geometries and energies matched those used in actual detection/analyses.

c. Conclusions

The inspector determined that, because: 1) surveys were being completed and documented as required by 10 CFR Part 20.1501(a), TS, and licensee procedures; 2) postings met regulatory requirements; 3) the personnel dosimetry program was acceptably implemented and doses were in conformance with 10 CFR Part 20 limits; 4) portable survey meters and laboratory instruments were being maintained and calibrated as required, the RPP being implemented by the licensee satisfied regulatory requirements.

7. Inspection of Transportation Activities

a. Inspection Scope (IP 86740)

The inspector interviewed licensee staff and reviewed selected aspects of the following to ensure that transportation requirements of 10 CFR, 49 CFR, and licensee procedures were being met:

- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001

b. Observations and Findings

The inspector confirmed that no byproduct material had been received or shipped since the last inspection.

c. Conclusions

No byproduct was transferred to or from the NSS.

8. Physical Security

a. Inspection Scope (IP 81401)

The inspector reviewed selected aspects of the following to ensure access control to the NSS and its interior spaces satisfied TS Sections 3.3 requirements:

- TS for the NSS, Amendment No. 12, dated May 29, 1994
- JRRF Patrol General Orders, dated December 20, 1999
- JRRF Procedures for Operations, dated December 20, 1999
- JRRF Fleet Security Patrol Instructions, Duties, and Responsibilities, dated December 20, 1999
- POP, Revised June 14, 1996
- security systems, equipment, and instrumentation
- operation of the Motorola Radio System Remote Alarm System

b. Observations and Findings

Although a NRC-approved, security plan is not required for the NSS, access to the site is controlled by use of location, barriers, gates, secured access points, and water patrols. The inspector toured the NSS and confirmed that the physical protection systems (barriers and alarms), equipment, and instrumentation were as required by the POP, JRRF procedures, and TS Section 3.3 requirements. The inspector also confirmed that JRRF crews and security patrols provide surveillance of the vessel as required by the POP.

Access to the vessel is only by boat and with permission of the licensee's representative, the Fleet Superintendent or his designee. Radiation control areas, as defined in TS Section 3.3, were secured, posted, and sealed as required. Keys and seals were maintained by the licensee or a designated representative as required.

c. Conclusions

The physical protection features of the Motorola Radio System Remote Alarm System, the equipment, procedures, and access control implementation, met the POP and TS Section 3.3 requirements, and satisfied JRRF procedures.

9. Effluents and Environmental Monitoring

a. Inspection Scope (IP 69001)

The inspector reviewed selected aspects of the following to ensure compliance with 10 CFR Part 20 and TS Sections 3.7.2.4 and 3.7.2.5 requirements:

- TS for the NSS, Amendment No. 12, dated May 29, 1994

- Scope of Work and Services, Radiological Surveillance for the NSS, FY 2004
- NSS/MH-1A Quarterly Structural Surveys from January 2001 to present
- Annual HP Survey, dated February 13, 2003
- Annual HP Survey, dated March 4, 2002
- Annual HP Survey, dated March 6, 2001
- NSS 2003 Annual Report, dated February 26, 2003
- NSS 2002 Annual Report, dated March 25, 2002
- NSS 2001 Annual Report, dated January 17, 2001

b. Observation and Findings

Since no fuel is on site, the only gaseous effluents would be those produced during dismantlement and other decommission operations. No dismantlement or decommissioning operations have been performed and no gaseous or liquid effluent had been release since the last inspection.

TS Sections 3.7.2.4 and 3.7.2.5 require semiannual thermoluminescent dosimeter or equivalent monitoring at strategic location throughout the vessel and semiannual water and bottom sediment sampling. The scope of work requires that the dosimeters be analyzed using a NVLAP approved personnel dosimetry service that has an environmental dosimetry quality assurance program. The program also requires that water and sediment samples be preserved and a chain-of-custody maintained. It also requires the alpha and beta activity in samples be determined using Method RP710, *Laboratory Method for Gross Alpha and Beta Activity Determination*, from the DOE Methods for Evaluating Environmental and Waste Management Samples, DOE/EM-0089T, or equivalent measurement and that quality assurance procedures be submitted and approved by the U.S. Army Corps of Engineers. The environmental monitoring program described in the scope of work and implemented by the licensee's contractor was acceptable to satisfy TS Sections 3.7.2.4 and 3.7.2.5 requirements.

The TLD measurements resulted in readings that were statistically indistinguishable from background. Results of vegetation, soil, and water sample analyses also showed no statistical difference from background.

c. Conclusion

No liquid or gaseous effluent has been release. Doses to the public were well below 10 CFR 20.1301 (a) limits. TS Sections 3.7.2.4 and 3.7.2.5 environmental requirements were met.

10. Follow-up on Previously Identified Issues

The inspector followed up on two violations (VIO) and one inspector follow-up item (IFI) as identified and documented in Inspection Report Nos. 50-238/2001-201 and 50-238/2000-201 respectively. The inspector reviewed these issues with the licensee to decide what actions had been taken.

- 1) IFI-50-238/2000-201-01 - Follow-up on the revision and updating of the TS for the NSS.

The issue of revising and updating the TS for the NSS was identified by an NRC Inspector as an IFI during a previous inspection in April 2000. During the January 2001, RAC meeting the status of the TS was reviewed. It was agreed that they are still in need of revision. It was concluded that MARAD personnel would be the ones responsible for this action.

During this inspection and a September 24, 2003, meeting between NRC staff and representatives of the MARAD, the inspector reviewed this issue with the licensee. The licensee indicated that they were still developing applicable TS revisions. This item is still open.

- 2) VIO-50-238/2001-201-01 - Failure to have a health physicist on call within two hours of the ship and the failure to have an ERAT available in case of a radiological emergency as required by TS.

TS Section 3.1, Administrative Responsibility, requires MARAD to have a health physicist on duty or on call within two (2) hours to provide health physics support for radiological emergencies or entry into radiation control areas. In addition, MARAD will provide an ERAT in the event of radiological emergencies.

During an inspection in April 2000, the issues of having a HP on call within two hours and establishing the services of an ERAT were discussed with site personnel. It was not apparent then whether or not such arrangements had actually been made. The issue was left as an unresolved item. When JRRF and MARAD personnel acknowledged, during the January 2001 inspection, that no such provisions had yet been made to meet the requirements of the TS, it was cited as a Level IV Violation.

During this inspection and a September 24, 2003, meeting between NRC staff and representatives of the MARAD, the inspector reviewed this issue with the licensee. The inspector confirmed that they had solicited bids from at least three entities in the surround area that could provide both the HP and ERAT support. The Director, Office of Ship Operations stated that one company would be contracted to provide the required services. This item is still open.

- 3) VIO-50-238/2001-201-02 - Failure to perform and document an adequate annual inspection of the primary and secondary systems to check for degradation as required by the TS.

Initially identified as an Unresolved Item in the April 2000 report it was cited as a Level IV Violation in the January 2001 inspection. During that inspection, it was determined that there was no guidance (i.e., a procedure or written guidelines) for this type of surveillance activity. Also, there were no records kept documenting the completion of the inspection of the primary and secondary systems.

Subsequently, on March 14, 2001, the licensee issued a procedure for the inspection. The inspector's review of the procedure and the March 4, 2002, and

February 13, 2003, surveys confirmed that the procedure and surveys acceptably met TS Section 3.7.6 surveillance requirements. This item is closed.

11. Exit Interview

The inspection scope and results were summarized on November 14, 2003, with licensee representatives. The inspector discussed the findings for each area reviewed. The licensee acknowledged the findings.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

*M. Bagley	Fleet Superintendent, JRRF, MARAD, DOT
D. Harris	High Voltage Electrician
J. Seelinger	Deputy Director, Office of Ship Operations, MARAD, DOT
R. Cocker	Radiological Safety Supervisor, Ft. Eustis Environmental Health and Safety

* attended exit interview

INSPECTION PROCEDURES USED

IP 40755	Class III Non-power Reactors
IP 69001	Class II Non-Power Reactors
IP 81401	Plans, Procedures, and Reviews
IP 86740	Inspection of Transportation Activities

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

NONE

Closed

VIO-50-238/2001-201-02	Failure to perform and document an adequate annual inspection of the primary and secondary systems to check for degradation as required by the TS.
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Discussed

IFI-50-238/2000-201-01	Follow-up on the revision and updating of the TSs for the N.S. Savannah.
VIO-50-238/2001-201-01	Failure to have a health physicist on call within two hours of the ship and the failure to have an Emergency Radiological Assistance Team available in case of a radiological emergency as required by TS.

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
CP	Cathodic Protection
DH	Dehumidifier
DOT	Department of Transportation
ERAT	Emergency Radiological Assistance Team
HP	Health Physics
IFI	Inspector Follow-up Item
JRRF	James River Reserve Fleet
MARAD	U. S. Maritime Administration
NRC	Nuclear Regulatory Commission
POP	Port Operating Plan
RAC	Review and Audit Committee
RPP	Radiation Protection Program
STA	Senior Technical Advisor
TS	Technical Specifications
VIO	Violations