



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, D.C. 20350-2000

IN REPLY REFER TO

5104

Ser N455C/OU595393

10 APR 00

From: Chairman, Naval Radiation Safety Committee
To: Distribution

Subj: MINUTES OF NAVAL RADIATION SAFETY COMMITTEE MEETING
FIRST QUARTER, CY-2000

Encl: (1) Quarterly Meeting Agenda
(2) Executive Secretary Report
(3) NRMP Action Summary
(4) Inspection Summary
(5) Depleted Uranium Penetrator Recovery Plan for Vieques

1. The Naval Radiation Safety Committee (NRSC) convened at 0835 on Friday, March 10, 2000 to discuss the agenda items provided in enclosure (1). The following individuals were in attendance:

RDML L. Baucom	Acting Chairman, NRSC
CAPT P. Blake	BUMED
CDR D. Farrand	NAVSEA 04N
CDR G. Higgins	Executive Secretary, NRSC
CDR S. Doremus	OIC, NAVSEADET RASO
CDR J. Pomerville	Recording Secretary, NRSC
LCDR S. Wolff	NEHC
LCDR P. Liotta	HQMC(SD)
Mr. S. Frampton	NAVSEA 08R
Mr. L. Reyes	NRC Region II Administrator
Mr. M. Fuller	NRC Region II Navy Program Manager
Dr. D. B. Howe	NRC Headquarters

2. RDML Baucom opened the meeting by welcoming the Committee members and the NRC representatives to the NRSC Meeting, First Quarter, 2000. He reported that he will relieve RADM Granuzzo as Chairman, Naval Radiation Safety Committee on March 17, 2000.

a. Commander Higgins opened the discussion with a status report regarding the NRSC agenda items for the quarter. Two old agenda items were presented from the previous NRSC Meeting, of which one remains incomplete and the second reported as a closed item. There was one new agenda item introduced. The status of all three items is described in enclosure (2).

Subj: MINUTES OF NAVAL RADIATION SAFETY COMMITTEE MEETING
FOURTH QUARTER, CY-1999

Admiral Baucom stressed the importance of ensuring that the root causes identified as a result of the investigation have been sufficiently addressed to prevent a reoccurrence.

- The second agenda item concerned the resumption of gamma radiography operations at Pearl Harbor Naval Shipyard (PHNSY) following the period of radiographer training and administrative reorganization. RASO has subsequently re-inspected the facility and evaluated radiography operations as satisfactory.

- The third agenda item concerned the RADIAC calibration facility in New London which encountered difficulties operating an AN/UDM-1A calibration device. Refer to enclosure (2).

- The fourth agenda item concerned a request for an amendment to the Navy Master Materials License (MML) to permit NRSC authorization of non-Navy employees to use Naval Radioactive Material Permitted materials under Navy supervision at Navy controlled facilities. Clarification was received from the NRC and determined an amendment was unnecessary and that the NRSC could approve prospective non-Navy users on a case by case basis.

b. Lieutenant Commander Wolff (NEHC), and Commander Doremus (RASO), discussed the status of Naval Radioactive Material Permit (NRMP) actions and inspections conducted during the quarter. NRMP actions for NEHC and RASO are listed as enclosures (3) and (4), respectively. The current number of NRMPs is 139, of these, 28 are managed by NEHC, with the balance, 111 managed by RASO.

c. Commander Farrand presented a briefing regarding the depleted uranium recovery plan for the Atlantic Fleet Weapons Training Facility, Vieques, Puerto Rico. His presentation is included as enclosure (5).

- Mr. Reyes of the NRC indicated that the NRC would continue to maintain close coordination with the Navy in the recovery of the remaining depleted uranium on the island of Vieques. Mr. Reyes stated that due to public concern on Vieques, the NRC was planning to perform environmental sampling in areas surrounding the Vieques training range. This would be coordinated with Navy, the Environmental Protection Agency (EPA) and the Centers for Disease Control (CDC). A specific time for this visit has not yet been determined.

- Rear Admiral Baucom mentioned that the presence of naturally occurring radioactive sources on the island is also a consideration when evaluating the environmental samples. Mr. Reyes agreed with RDML Baucom and stated that evaluation of any naturally occurring sources would be part of NRC's action plan regarding the visit. Mr. Reyes also stated that the NRC has the

Subj: MINUTES OF NAVAL RADIATION SAFETY COMMITTEE MEETING
FOURTH QUARTER, CY-1999

- Rear Admiral Baucom mentioned that the presence of naturally occurring radioactive sources on the island is also a consideration when evaluating the environmental samples. Mr. Reyes agreed with RDML Baucom and stated that evaluation of any naturally occurring sources would be part of NRC's action plan regarding the visit. Mr. Reyes also stated that the NRC has the expertise to evaluate the results and accuracy of any samples or surveys conducted.

d. Rear Admiral Baucom afforded the NRC an opportunity to discuss any issues of programmatic interest.

- Mr. Reyes stressed the importance of the timing and coordination of the depleted uranium recovery efforts on Vieques. Coordination will be necessary through the NRC, Navy, CDC, EPA and the Puerto Rican Department of Health.

- Commander Higgins mentioned that all recovery efforts are dependent upon the unimpeded access of the Navy to Vieques in consideration of the current situation with protestors at the facility.

- Mr. Fuller further discussed that the NRC is planning an environmental sampling trip to Vieques and that the NRC is still formulating these plans. Mr. Fuller also stated that the Navy's work plan previously submitted to NRC was sent to NRC Headquarters and that the technical review of this document has been completed. He reported that the NRC comments would be forwarded to the NRSC.

- CDR Farrand said that once the above mentioned guidance was received by the NRSC, the NRSC could incorporate the guidance provided into the Navy recovery plan.

- Mr. Reyes mentioned that if the intent of the Navy was to release the area for unrestricted use, then the Navy's release criteria must coincide with the NRC's release criteria.

- RDML Baucom mentioned that it would be unlikely that the affected area would be released for unrestricted use as it has been a firing range for some time and there are other hazards present that are associated with any firing range.

- Mr. Fuller reiterated that close coordination and review of any release criteria is necessary. He said that the NRC fully agrees that the Navy has the necessary expertise to properly perform detection surveys at the facility. Mr. Fuller stated

7
Subj: MINUTES OF NAVAL RADIATION SAFETY COMMITTEE MEETING
FOURTH QUARTER, CY-1999

questions from these academic institutions. The Navy appears to be a "trail blazer" once again.

- Dr. Howe mentioned that the final rule on 10 CFR Part 35 is expected very soon, most likely this summer. She stated that the rule would most likely not be in affect until early CY-1001.

- Rear Admiral Baucom thanked the NRC for their comments and that the NRSC will continue to focus it's energies on upholding the highest possible standards.

3. Rear Admiral Baucom adjourned the NRSC Meeting for the First Quarter CY-2000 at 0945. The date for the next meeting of the NRSC is tentatively scheduled for Wednesday, June 7, 2000 at 1030.



L. C. BAUCOM
Rear Admiral, U.S. Navy

Copy to:
NRSC Members
COMNAVSEASYSKOM (08R)
NRC Reg. II (ATTN: M. Fuller)
NRC Headquarters (ATTN: Dr. D.B. Howe, Mail Stop 6H3)

**NAVAL RADIATION SAFETY COMMITTEE
MEETING OF March 10, 2000**

AGENDA

- a. **Executive Secretary report on pending action items from NRSC Meeting, 4th Quarter, December 6, 1999.**

1) Old Action Items:

- **Expenditure of depleted uranium, Vieques, Puerto Rico.**
- **Gamma Radiography Inspection, Naval Shipyard Pearl Harbor, HI.**
- **MML Amendment Request, Authorized User Clarification**

2) New Action Items:

- **RADIAC Calibration Facility, New London, CT.**

- b. **Update on permitting and inspection actions - NEHC/RASO.**

- c. **Presentation Period-**

- 1) **CDR David Farrand – Naval Sea Systems Command (04N)
Depleted Uranium Recovery Plan for Vieques, Puerto Rico.**

- d. **NRC Discussion Period - NRC Region II.**

Future topics of interest for the NRSC meeting should be referred to CDR Pomerville at (703) 602-2582 or Fax: (703) 602-4786.

The next NRSC Meeting is proposed for June 7, 2000. The first Wednesday of the first week of each quarter.

Enclosure (1)

Naval Radiation Safety Committee Meeting
1st Quarter - March 10, 2000

1. N45 Opening Remarks-

Admiral Baucom welcomes NRC Region II and Headquarters Representatives.

Mr. Luis Reyes	NRC Region II, Regional Administrator
Mr. Michael Fuller	NRC Region II, Navy MML Manager
Dr. D. B. Howe	NRC Headquarters, MML Administrator

2. Executive Secretary NRSC welcomes visitors and introduces NRSC Members to Admiral Baucom, Incoming Chairman, Naval Radiation Safety Committee:

RDML Baucom	Chairman, Naval Radiation Safety Committee
<i>(Incoming Chairman)</i>	Director, Environmental Protection, Safety and Occupational Health Division (N45)

CAPT Blake	Bureau of Medicine and Surgery (Code MED-211) Office of Undersea Medicine and Radiation Health
------------	---

CDR Farrand	Director, Radiological Controls Program Office Commander, Naval Sea Systems Command (SEA-04N)
-------------	--

CDR Higgins	Executive Secretary, Naval Radiation Safety Committee Head, Radiological Control and Health Branch (N455)
-------------	--

CDR Doremus	Officer in Charge, Radiological Affairs Support Office Naval Weapons Station, Yorktown, Virginia
-------------	---

CDR Pomerville	Recording Secretary, Naval Radiation Safety Committee Radiological Control and Health Branch (N455C)
----------------	---

LCDR Wolff	Head, Radiation Health Team Navy Environmental Health Center, Norfolk, VA
------------	--

LCDR Liotta	Health Physics Program Manager, Safety Division, United States Marine Corps
-------------	--

Mr. Frampton	Radiation Health Program Manager
<i>(Ad hoc Member)</i>	Naval Nuclear Power Program Naval Sea Systems Command (NAVSEA-08R)

3. Introductory remarks by RDML Baucom to the NRSC members and the NRC.

4. Members of the NRSC provide brief introductory remarks to RDML Baucom.

- Introductions and brief biographical background.
- Command and supporting role to the NRSC.

5. Executive Secretary begins the discussion at the discretion of the Chairman.

6. There are **2 Outstanding Action Items** reported at or carried forward from the previous NRSC Meeting, 4th Quarter 1999 (December 6, 1999). There is **1 New Action Item**.

Outstanding Action Item #1.

Inadvertent Expenditure of Depleted Uranium Rounds at Vieques Range, PR.

19FEB99	263 DU rounds inadvertently expended at Vieques Range, Puerto Rico.
05MAR99	Discovery reported to NRSC. NRC notified by phone.
10MAR99	Recovery team dispatched to Vieques 10 MAR99. 57 rounds recovered,
01APR99	Initial written notification provided to NRC (30 Day Report).
01JUN99	1. Progress Report on recovery actions to date to NRC REG II. 2. NRC issues Preliminary Notification of Event or Unusual Occurrence.
02JUN99	DU recovery operations briefed to NRSC and NRC at NRSC Meeting.
05AUG99	Range refurbishment cancelled by AFWTF due to trespassers on range and potential injury of trespassers during EOD sweep/clearing.
19AUG99	Navy issues NOV to US Navy and US Marine Corps for DU incident.
06DEC99	Status Report briefed at NRSC Meeting, 4 th Quarter, 1999. Recovery plan briefed to NRSC/NRC by OIC, NAVSEADET RASO.
10JAN00	Work Survey Plan for Vieques released by N45 to NRC Region II. Plan forwarded to NRC Headquarters for review/consideration.
28FEB00	NRC Region II communicated with N455 and reported that NRC Headquarters had reviewed the Vieques Work Survey Plan and had prepared amplifying recommendations to supplement the RASO Plan.
10MAR00	Remarks by CDR Farrand regarding logistic preparations for return.
10MAR00	Action Item #1 Pending.

Outstanding Action Item #2.

Gamma Radiography Inspection at Naval Shipyard, Pearl Harbor, HI.

16JUN99	Radiography boundary violation at Naval Shipyard, Pearl Harbor. - During critique of incident a Severity Level III NOV was self identified. - Monitor failed to comply with dosimetry requirements of 20CFR34.47.
09AUG99	NRSC issued Severity Level III NOV to Naval Shipyard, Pearl Harbor
17AUG99	RASO radiography inspector preliminarily identifies 2 Level III violations. CO/RSO initiates 30 Day Stand Down for Training.
08SEP99	RASO Inspection Report released by NRSC. Three Level III NOVs.
01NOV99	NRSC/RASO inspection team returned to PHNSY- 1. PHNSY determines that due to training deficiencies they could not conduct radiography operation as part of inspection. 2. RASO inspectors postponed inspection completion 3. RASO will return to PHNSY in 01/00 to re-inspect.
20JAN00	RASO concludes inspection of gamma radiography program. Overall evaluation was SATISFACTORY. Reported to NRC by Letter.
10MAR00	Action Item #2 Closed.

New Action Item**RADIAC Calibration Facility, New London, CT.**

06DEC99	Technician at RADIAC Calibration Laboratory, Naval Submarine Support Facility, New London, CT., encountered difficulties operating AN/UDM-1A. Shielded gamma source presented no exposure potential.
07DEC99	On-site inspection by RADIAC calibration engineers from SPAWARSYSCEN, Charleston, SC. identified evidence of "unauthorized maintenance" to irradiator. Replacement of bolt and retaining cotter pin.
09DEC99	Calibration certification withdrawn by SPAWARSYSCEN, Charleston, suspending all further calibration procedures. NRSC notified by RASO.
13DEC99	NSSF RSO commenced an investigation into the material deficiency. Concurrent training was conducted Northeast Region RADIAC Field Manager for verbatim compliance with procedures and NRMP.
14DEC99	Repairs performed on AN/UDM-1A. Completed on 16DEC99.
16DEC99	NRMP permitted operations with gamma source were suspended by NRSC via message to allow a stand-down for training.
12JAN00	RASO / NRSC reviewed results of equipment repair, training, corrective actions taken, and re-certification audit conducted by SPAWARSYSCEN.
21JAN00	Permission to resume operations per Chairman, NRSC.
10MAR00	Action Item Closed.

Master Materials License Amendment Request – Executive Secretary Comments Clarification of Authorized User Status.

28OCT99	Amendment #12 requested NRSC ability to consider/authorize non-Navy employees permission to use NRMP materials under Navy supervision.
03FEB00	NRC Reg II Ltr: Amendment is unnecessary, NRC clarification provided.
10MAR00	NRSC Executive Secretary comments. Discussion Item Closure.

Updates on permitting and inspection actions:**NEHC – LCDR Wolff, MSC, USN****RASO – CDR Doremus, MSC, USN**

Presentations: **Recovery of Depleted Uranium (DU) at Inner Range, Vieques,**
CDR Farrand, MSC, USN
Director, Radiological Controls Program Office
Commander, Naval Sea Systems Command (SEA-04N)

Nuclear Regulatory Commission's Report
Mr. Luis Reyes, Regional Administrator, NRC Region II
Mr. Fuller, NRC Region II
Dr. Donna-Beth Howe, NRC Headquarters

Closing Remarks: **Admiral Baucom, USN**
Chairman, Naval Radiation Safety Committee

Next Meeting: **Tentatively scheduled for June 7, 2000**

NRMP ACTIONS/INSPECTIONS 1st QUARTER CY-2000

TECHNICAL SUPPORT CENTER = NAVY ENVIRONMENTAL HEALTH CENTER (NEHC)

Permit Actions	New Issues	Terminations	Amendments	Renewals	Totals
Permit Actions Carried Over from Previous Quarter	0	0	2	0	2
Permit Actions Received During Quarter	0	0	5	0	5
Total Permit Actions "In House" During Quarter	0	0	7	0	7
Actions Signed Out by NRSC	0	0	6	0	6
Quarterly Average Action Processing Time in Days	N/A	N/A	22	N/A	
Actions Exceeding NRSC Guidelines *1	0	0	0	0	0
Actions Pending at End of Quarter	0	0	1	0	1

Oldest Pending Permit Actions (Command)	NRMP Number	Days in House	Action
Naval Hospital, Camp Pendleton, CA	04-68094-11NP	13	A

Permit Inspections	Total
Inspection Reports Carried over from Previous Quarter	0
Inspections Conducted During Quarter	0
Total Inspection Reports "In House" During Quarter	0
Inspection Reports Signed out by NRSC	0
Quarterly Average Inspection Report Processing Time in Days	N/A
Longest Inspection Report Processing Time This Quarter in Days	N/A
Inspection Reports Exceeding NRSC Guidelines *2	0
Inspection Reports Pending at End of Quarter	0

*1 (New Issues, Terminations, Amendments < 6 Months) (Renewals < 12 Months)

*2 (Satisfactory Inspection < 60 days, Unsatisfactory or Containing Level III Violation < 14 days)

NRMP ACTIONS/INSPECTIONS 1st QUARTER CY-2000

TECHNICAL SUPPORT CENTER = RADIOLOGICAL AFFAIRS SUPPORT OFFICE (RASO)

<i>Permit Actions</i>	New Issues	Terminations	Amendments	Renewals	Totals
Permit Actions Carried Over from Previous Quarter	0	0	1	2	3
Permit Actions Received During Quarter	3	2	12	2	19
Total Permit Actions "In House" During Quarter	3*	2	13**	4	22
Actions Signed Out by NRSC	1	2	11	3	17
Quarterly Average Action Processing Time in Days	16	48	36	89	
Actions Exceeding NRSC Guidelines *1	0	0	0	0	0
Actions Pending at End of Quarter	1	0	1	1	3

Oldest Pending Permit Actions (Command)	NRMP Number	Days in House	Action
NAVSTA Rota, Spain	77-62836-C1NP	234***	R
NAVAIRSYSCOM	19-00019-T4NP	39	N
NAVSHIPYD & IMF Pearl Harbor	53-32253-A1NP	8	A

<i>Permit Inspections</i>	Total
Inspection Reports Carried over from Previous Quarter	5
Inspections Conducted During Quarter	11
Total Inspection Reports "In House" During Quarter	16
Inspection Reports Signed out by NRSC	13
Quarterly Average Inspection Report Processing Time in Days	21
Longest Inspection Report Processing Time This Quarter in Days	36
Inspection Reports Exceeding NRSC Guidelines *2	0
Inspection Reports Pending at End of Quarter	3

*SWFPAC returned for total resubmission

** NAVSEA T1NP returned for total resubmission

*** RASO completed 3 reviews awaiting final smooth

*1 (New Issues, Terminations, Amendments < 6 Months) (Renewals < 12 Months)

*2 (Satisfactory Inspection < 60 days, Unsatisfactory or Containing Level III Violation < 14 days)

LISTING OF NRMP ACTIONS/INSPECTIONS
1st QUARTER CY-2000

#	DATE	ACTIVITY	STATE CODE	UIC	TYPE CODE	NEHC/ RASO	ACTION
---	------	----------	------------	-----	-----------	------------	--------

New Issues: RASO = 1 NEHC = 0

1	17 Dec 99	Naval Mobile Construction Battalion FORTY, Port Hueneme, CA	04	55448	11	RASO	Issue

Terminations: RASO = 2 NEHC = 0

1	17 Dec 99	Naval Mobile Construction Battalion FORTY, Port Hueneme, CA	04	55418	11	RASO	Termination
2	12 Jan 00	Naval Construction Training Center, Gulfport, MS	23	65971	11	RASO	Termination

LISTING OF NRMP ACTIONS/INSPECTIONS
1st QUARTER CY-2000

#	DATE	ACTIVITY	STATE CODE	UIC	TYPE CODE	NEHC/ RASO	ACTION
Amendments: RASO = 11 NEHC = 6							
1	03 Jan 00	Naval Sea Systems Command Detachment, Radiological Affairs Support Office, Yorktown, VA	45	45650	B1	RASO	Amendment
2	12 Jan 00	Naval Air Weapons Station, China Lake, CA	04	68937	J1	RASO	Amendment
3	12 Jan 00	Space and Naval Warfare Systems Center, San Diego, CA	04	66001	C1	RASO	Amendment
4	11 Feb 00	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	T1	RASO	Amendment
5	14 Feb 00	Space and Naval Warfare Systems Center, Charleston, SC	39	65236	C1	RASO	Amendment
6	22 Feb 00	Space and Naval Warfare Systems Center, Charleston, SC	39	65236	C2	RASO	Amendment
7	22 Feb 00	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	Q1	RASO	Amendment
8	22 Feb 00	31st Naval Construction Regiment, Port Hueneme, CA	04	55752	I1	RASO	Amendment
9	12 Jan 00	Naval Shipyard, Norfolk, VA	45	00181	A1	RASO	Amendment (Corrected Copy)
10	01 Mar 00	U.S. Space and Naval Warfare Systems Facility Pacific, Yokosuka, JP	80	66120	C1	RASO	Amendment
11	01 Mar 00	Naval Submarine Support Facility, New London, CT	06	68316	C1	RASO	Amendment
1	06 Dec 99	Naval Hospital, Jacksonville, FL	09	00232	11	NEHC	Amendment
2	10 Dec 99	Naval Medical Center, San Diego, CA	04	00259	11	NEHC	Amendment
3	17 Dec 99	Naval Hospital, Great Lakes, IL	12	00211	11	NEHC	Amendment
4	19 Jan 00	Naval Ambulatory Care Center, Groton, CT	06	61726	11	NEHC	Amendment
5	01 Feb 00	Naval Hospital, Camp Lejeune, NC	32	68093	11	NEHC	Amendment
6	24 Feb 00	Naval Hospital, Guam	56	68096	11	NEHC	Amendment

LISTING OF NRMP ACTIONS/INSPECTIONS
1st QUARTER CY-2000

#	DATE	ACTIVITY	STATE CODE	UIC	TYPE CODE	NEHC/ RASO	ACTION
---	------	----------	------------	-----	-----------	------------	--------

Renewals: RASO = 3 NEHC = 0

1	01 Mar 00	Naval Air Weapons Station, China Lake, CA	04	68937	J1	RASO	Renewal
2	01 Mar 00	Naval Air Weapons Station, China Lake, CA	04	68937	I1	RASO	Renewal
3	01 Mar 00	Atlantic Ordnance Command, Yorktown, VA	45	00109	C1	RASO	Renewal

Inspections: RASO = 13 NEHC = 0

1	03 Dec 99	Naval Oceanographic Office, Stennis Space Center, MS	23	62306	B2	RASO	Inspection
2	03 Dec 99	Naval Air Station Joint Reserve Base, New Orleans, LA	17	00206	J1	RASO	Inspection
3	17 Dec 99	Naval Air Warfare Center, Aircraft Division, Patuxent River, MD	19	00421	W2	RASO	Inspection
4	17 Dec 99	Naval Shipyard & Intermediate Maintenance Facility, Pearl Harbor, HI	53	32253	A1	RASO	Inspection
5	12 Jan 00	Naval Shipyard, Norfolk, VA	45	00181	A1	RASO	Inspection
6	12 Jan 00	Naval Surface Warfare Center, Carderock Division, West Bethesda, MD	19	61533	E1	RASO	Inspection
7	12 Jan 00	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	Q1	RASO	Inspection
8	12 Jan 00	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	B1	RASO	Inspection
9	12 Jan 00	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	W1	RASO	Inspection
10	20 Jan 00	Naval Shipyard & Intermediate Maintenance Facility, Pearl Harbor, HI	53	32253	A1	RASO	Inspection
11	01 Feb 00	Public Works Center, Norfolk, VA	45	00187	J1	RASO	Inspection
12	01 Feb 00	Naval Research Laboratory, Washington, DC	08	00173	E1	RASO	Inspection
13	22 Feb 00	Shore Intermediate Maintenance Activity, San Diego, CA	04	65918	A1	RASO	Inspection

LISTING OF NRMP ACTIONS/INSPECTIONS
1st QUARTER CY-2000

#	DATE	ACTIVITY	STATE CODE	UIC	TYPE CODE	NEHC/ RASO	ACTION
---	------	----------	------------	-----	-----------	------------	--------

QA Program Actions: RASO = 0 NEHC = 0

--	--	--	--	--	--	--	--

CURRENT NRMPs 1st QUARTER CY-2000

Type Code	Description	Number
1	Nuclear Medicine (Limited Scope)	13
2	Nuclear Medicine (Broad Scope)	1
3	Teletherapy	0
4	Research (Non-Human Use)	7
5	Irradiators (< 10,000 Curies)	0
6	Navy Drug Screening Laboratories	3
7	Gas Chromatographs	2
8	Special Nuclear Material SNM (< 200 grams)	1
9	Other (Dosimeter Calibration)	1
Total NEHC NRMPs		28

Type Code	Description	Number
A	Radiography	14
B	General Industrial (Not Otherwise Coded)	11
C	Calibrator (> 100 Curies)	18
D	Environmental Applications	0
E	Type A Broad Scope	3
F	Type B Broad Scope	1
G	Type C Broad Scope	0
H	Special Nuclear Material SNM (Unsealed, < Critical Mass)	1
I	Portable Gauges	12
J	Analytical Measuring Instruments	21
K	Gas Chromatographs	1
L	DU Munitions Testing (Outdoors/Indoors)	4
M	Subcritical Assemblies	1
N	RTG Power Sources	2
O	Not Used	0
P	Fixed Gauges	1
Q	Irradiators	1
R	Buried Waste (NEESA)	1
S	Source Material	3
T	Radioactive Commodities Handling & Storage	11
U	Not Used	0
V	Special Nuclear Material SNM (< 200 grams)	1
W	Research and Development	4
X	Calibrator (< 100 Curies)	0
Y	Not Used	0
Z	Not Used	0
Total RASO NRMPs		111

GRAND TOTAL NRMPs 139

LISTING OF CURRENT NRMPs (SORTED BY INSPECTION TARGET DATE)
 NRC SUGGESTED INSPECTION WINDOW: (FREQUENCY OF 1 to 3 YEARS +/- 25%)
 (FREQUENCY OF 5 YEARS OR GREATER +/- 1 YEAR)

#	ACTIVITY	STATE	UIC	TYPE CODE	USE CODE	NEHC/RASO	EXISTING/NEW ISSUE	LAST INSPECTION	TARGET DATE	OVERDUE (*)	INSPECTIONS SCHEDULED OR COMMENTS
1	Naval Sea Systems Command Detachment, Radiological Affairs Support Office, Yorktown,	45	45650	B	1	RASO	EXISTING	26 Sep 96	27 Sep 99		
2	Naval Air Systems Command, NAS, Patuxent River, MD	19	00019	T	2	RASO	EXISTING	05 Dec 96	05 Dec 99		
3	Naval Air Systems Command, Patuxent River, MD	19	00019	T	3	RASO	EXISTING	05 Dec 96	05 Dec 99		
4	Naval Weapons Station, Concord, CA	04	60036	B	1	RASO	EXISTING	22 Jan 97	23 Jan 00		
5	Strategic Weapons Facility, Atlantic, Kings Bay, GA	10	68733	B	1	RASO	EXISTING	25 Jan 97	25 Jan 00		
6	USS Frank Cable (AS-40)	59	45255	C	1	RASO	EXISTING	31 Jan 97	31 Jan 00		
7	Marine Corps Logistics Base, Barstow, CA	04	38010	C	1	RASO	EXISTING	06 Feb 97	06 Feb 00		
8	Service School Command, Great Lakes, IL	12	0580A	C	1	RASO	EXISTING	12 Feb 97	12 Feb 00		
9	Service School Command, Great Lakes, IL	12	0580A	A	1	RASO	EXISTING	18 Feb 99	18 Feb 00		
10	Navy Mobile Construction Battalion SEVEN-FOUR	23	55488	I	1	RASO	EXISTING	15 Mar 95	14 Mar 00		
11	USS Emory S. Land (AS-39)	59	20635	A	1	RASO	EXISTING	16 Mar 99	16 Mar 00		
12	USS Frank Cable (AS-40)	59	45255	A	1	RASO	EXISTING	29 Mar 99	28 Mar 00		
13	Naval Hospital, Guam	56	68096	1	1	NEHC	EXISTING	08 Apr 97	08 Apr 00		
14	Trident Refit Facility, Kings Bay, GA	10	44466	A	1	RASO	EXISTING	12 Apr 99	11 Apr 00		
15	Shore Intermediate Maintenance Activity, Norfolk, VA	45	32770	A	1	RASO	EXISTING	20 Apr 99	19 Apr 00		
16	Navy EOD Technical Center, Indian Head, MD	19	0464A	T	1	RASO	EXISTING	29 Apr 97	29 Apr 00		
17	Naval Support Station, Mechanicsburg, PA	37	32414	J	1	RASO	EXISTING	03 May 94	02 May 00		
18	Naval Medical Research Unit #2, Jakarta, Indonesia	62	30851	4	1	NEHC	EXISTING	10 May 97	09 May 00		
19	Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA	45	00178	B	1	RASO	EXISTING	14 May 97	13 May 00		
20	Director, Strategic Systems Programs, Arlington, VA	45	00030	T	1	RASO	EXISTING	22 May 97	22 May 00		
21	Navy EOD Technical Center, Indian Head, MD	19	0464A	A	1	RASO	EXISTING	24 May 99	23 May 00		
22	Naval Undersea Warfare Center Division, Keyport, WA	46	00253	A	1	RASO	EXISTING	26 May 99	25 May 00		
23	Naval Hospital, Camp Lejeune, NC	32	68093	1	1	NEHC	EXISTING	28 May 97	28 May 00		
24	Naval Ordnance Center, Pacific Division, Fallbrook Detachment, Fallbrook, CA	04	00396	L	1	RASO	EXISTING	08 Jun 95	08 Jun 00		
25	Marine Corps Logistics Base, Albany, GA	10	67004	W	1	RASO	EXISTING	10 Jul 97	09 Jul 00		
26	Naval Hospital, Groton, CT	06	61726	1	1	NEHC	EXISTING	23 Jul 97	23 Jul 00		

LISTING OF CURRENT NRMPs (SORTED BY INSPECTION TARGET DATE)
 NRC SUGGESTED INSPECTION WINDOW: (FREQUENCY OF 1 to 3 YEARS +/- 25%)
 (FREQUENCY OF 5 YEARS OR GREATER +/- 1 YEAR)

#	ACTIVITY	STATE	UIC	TYPE CODE	USE CODE	NEHC/RASO	EXISTING/NEW ISSUE	LAST INSPECTION	TARGET DATE	OVERDUE (1)	INSPECTIONS SCHEDULED OR COMMENTS
27	Naval Hospital, Newport, RI	38	68086	1	1	NEHC	EXISTING	25 Jul 97	25 Jul 00		
28	Naval Medical Research Center, Bethesda, MD	19	32398	4	1	NEHC	EXISTING	30 Jul 97	29 Jul 00		
29	Naval Submarine Support Facility, New London, CT	06	68316	A	1	RASO	EXISTING	11 Aug 99	10 Aug 00		
30	Naval Shipyard, Portsmouth, NH	28	00102	A	1	RASO	EXISTING	12 Aug 99	11 Aug 00		
31	Naval Aerospace Medical Research Laboratory, Pensacola, FL	09	66452	4	1	NEHC	EXISTING	18 Aug 97	17 Aug 00		
32	Puget Sound Naval Shipyard, Bremerton, WA	46	00251	A	1	RASO	EXISTING	24 Aug 99	23 Aug 00		
33	Naval Intermediate Maintenance Activity, Pacific Northwest, Silverdale, WA	46	68438	A	1	RASO	EXISTING	26 Aug 99	25 Aug 00		
34	Naval Medical Research Unit #3, Cairo, Egypt	61	61751	4	1	NEHC	EXISTING	10 Sep 97	09 Sep 00		
35	Space and Naval Warfare Systems Center, San Diego, CA	04	66001	E	1	RASO	EXISTING	16 Sep 98	15 Sep 00		
36	Naval Aviation Depot, Cherry Point, NC	32	65923	S	1	RASO	EXISTING	17 Sep 97	17 Sep 00		
37	Indian Head Division, Naval Surface Warfare Center, Yorktown Detachment, Yorktown, VA	45	47652	J	1	RASO	EXISTING	13 Oct 94	12 Oct 00		
38	Naval Medical Research Center, Detachment-Toxicology (NMRC/TD), Wright-Patterson AFB,	34	41817	4	1	NEHC	EXISTING	22 Oct 97	21 Oct 00		
39	Naval Weapons Station, Concord, CA	04	60036	L	1	RASO	EXISTING	26 Oct 95	26 Oct 00		
40	Marine Corps Logistics Base, Albany, GA	10	67004	T	1	RASO	EXISTING	04 Nov 97	04 Nov 00		
41	Naval Shipyard, Portsmouth, NH	28	00102	C	1	RASO	EXISTING	20 Nov 97	19 Nov 00		
42	Atlantic Ordnance Command, Yorktown, VA	45	00109	C	1	RASO	EXISTING	21 Nov 97	20 Nov 00		
43	Naval Shipyard, Norfolk, VA	45	00181	A	1	RASO	EXISTING	03 Dec 99	02 Dec 00		
44	Naval Medical Center, San Diego, CA	04	00259	1	1	NEHC	EXISTING	03 Dec 97	03 Dec 00		
45	Public Works Center, Pensacola, FL	09	65114	J	1	RASO	EXISTING	05 Dec 94	04 Dec 00		
46	Naval Hospital, Great Lakes, IL	12	00211	1	1	NEHC	EXISTING	12 Jan 98	12 Jan 01		
47	Naval Shipyard & Intermediate Maintenance Facility, Pearl Harbor, HI	53	32253	A	1	RASO	EXISTING	14 Jan 00	14 Jan 01		
48	Navy Drug Screening Laboratory, Great Lakes, IL	12	68849	6	1	NEHC	EXISTING	14 Jan 98	14 Jan 01		
49	Naval Medical Research Center Detachment, Lima, Peru	87	44852	4	1	NEHC	EXISTING	28 Jan 98	27 Jan 01		
50	Naval Hospital, Okinawa, Japan	63	68470	1	1	NEHC	EXISTING	28 Jan 98	28 Jan 01		
51	Shore Intermediate Maintenance Activity, San Diego, CA	04	65918	A	1	RASO	EXISTING	01 Feb 00	31 Jan 01		
52	US Naval Academy, Annapolis, MD	19	00161	M	1	RASO	EXISTING	15 Mar 96	15 Mar 01		

LISTING OF CURRENT NRMPs (SORTED BY INSPECTION TARGET DATE)
 NRC SUGGESTED INSPECTION WINDOW: (FREQUENCY OF 1 to 3 YEARS +/- 25%)
 (FREQUENCY OF 5 YEARS OR GREATER +/- 1 YEAR)

#	ACTIVITY	STATE	UIC	TYPE CODE	USE CODE	NEHC/RASO	EXISTING/NEW ISSUE	LAST INSPECTION	TARGET DATE	OVERDUE (*)	INSPECTIONS SCHEDULED OR COMMENTS
53	US Naval Academy, Annapolis, MD	19	00161	V	1	RASO	EXISTING	15 Mar 96	15 Mar 01		
54	Naval Postgraduate School, Monterey, CA	04	62271	J	1	RASO	EXISTING	28 Mar 95	28 Mar 01		
55	Navy Drug Screening Laboratory, Jacksonville, FL	09	68850	6	1	NEHC	EXISTING	13 Apr 98	13 Apr 01		
56	Naval Air Weapons Station, China Lake, CA	04	60530	B	1	RASO	EXISTING	08 May 98	08 May 01		
57	Public Works Center, Pearl Harbor, HI	53	62755	J	1	RASO	EXISTING	19 May 95	19 May 01		
58	Naval Postgraduate School, Monterey, CA	04	62271	H	1	RASO	EXISTING	16 Jun 99	16 Jun 01		
59	Marine Corps Logistics Base, Albany, GA	10	67004	C	1	RASO	EXISTING	06 Aug 98	05 Aug 01		
60	Marine Corps Logistics Base, Albany, GA	10	67004	T	2	RASO	EXISTING	06 Aug 98	06 Aug 01		
61	Marine Corps Logistics Base, Albany, GA	10	67004	T	3	RASO	EXISTING	06 Aug 98	06 Aug 01		
62	Puget Sound Naval Shipyard, Bremerton, WA	46	00251	C	1	RASO	EXISTING	28 Aug 98	27 Aug 01		
63	Naval Dosimetry Center, Bethesda, MD	19	48539	8	3	NEHC	EXISTING	15 Sep 98	14 Sep 01		
64	Naval Dosimetry Center, Bethesda, MD	19	48539	9	1	NEHC	EXISTING	15 Sep 98	14 Sep 01		
65	National Naval Dental Center, Bethesda, MD	19	0608A	4	1	NEHC	EXISTING	16 Sep 98	15 Sep 01		
66	Space and Naval Warfare Systems Center, San Diego, CA	04	66001	C	1	RASO	EXISTING	16 Sep 98	15 Sep 01		
67	Naval Command, Control and Ocean Surveillance Center, ISE, East Coast Division, North	39	65236	C	1	RASO	EXISTING	18 Sep 98	17 Sep 01		
68	Naval Surface Warfare Center, Indian Head Division, Indian Head, MD	19	00174	P	1	RASO	EXISTING	20 Sep 96	20 Sep 01		
69	Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA	45	00178	S	1	RASO	EXISTING	20 Oct 98	19 Oct 01		
70	Navy Mobile Construction Battalion FIVE, Port Hueneme, CA	04	55115	I	1	RASO	EXISTING	25 Oct 96	25 Oct 01		
71	Naval Air Weapons Station, China Lake, CA	04	68937	I	1	RASO	EXISTING	28 Oct 96	28 Oct 01		
72	Naval Oceanographic Office, Stennis Space Center, MS	23	62306	B	1	RASO	EXISTING	07 Dec 98	07 Dec 01		
73	Naval Mobile Construction Battalion SEVEN	23	55117	I	1	RASO	EXISTING	09 Dec 96	09 Dec 01		
74	31st Naval Construction Regiment, Port Hueneme, CA	04	55752	I	1	RASO	EXISTING	12 Dec 96	12 Dec 01		
75	Naval Research Laboratory, Washington, DC	08	00173	E	1	RASO	EXISTING	17 Dec 99	17 Dec 01		
76	Naval Surface Warfare Center, Carderock Division, West Bethesda, MD	19	61533	E	1	RASO	EXISTING	17 Dec 99	17 Dec 01		
77	Public Works Center, Guam	56	62395	J	1	RASO	EXISTING	12 Jan 96	12 Jan 02		
78	Navy Public Works Center, Yokosuka, Japan	80	65115	J	1	RASO	EXISTING	24 Jan 96	23 Jan 02		

LISTING OF CURRENT NRMPs (SORTED BY INSPECTION TARGET DATE)
 NRC SUGGESTED INSPECTION WINDOW: (FREQUENCY OF 1 to 3 YEARS +/- 25%)
 (FREQUENCY OF 5 YEARS OR GREATER +/- 1 YEAR)

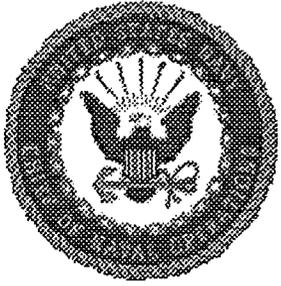
#	ACTIVITY	STATE	LIC	TYPE CODE	USE CODE	NEHC/RASO	EXISTING/NEW ISSUE	LAST INSPECTION	TARGET DATE	OVERDUE (*)	INSPECTIONS SCHEDULED OR COMMENTS
79	Naval Hospital, Camp Pendleton, CA	04	68094	1	1	NEHC	EXISTING	26 Jan 99	26 Jan 02		
80	Navy Drug Screening Laboratory, San Diego, CA	04	68853	6	1	NEHC	EXISTING	28 Jan 99	28 Jan 02		
81	Naval Station Rota, Spain	77	62863	C	1	RASO	EXISTING	04 Mar 99	03 Mar 02		
82	USS Emory S. Land (AS-39)	59	20635	C	1	RASO	EXISTING	16 Mar 99	15 Mar 02		
83	Naval Hospital, Jacksonville, FL	09	00232	1	1	NEHC	EXISTING	24 Mar 99	24 Mar 02		
84	U.S. Space and Naval Warfare Systems Facility Pacific, Yokosuka, JP	80	66120	C	1	RASO	EXISTING	26 Mar 99	25 Mar 02		
85	Material Readiness Battalion, 3D Force Service Support Group, FMF, Pacific	63	29021	C	1	RASO	EXISTING	29 Mar 99	28 Mar 02		
86	Marine Corps Base, Camp Lejeune, NC	32	67001	J	1	RASO	EXISTING	11 Apr 96	11 Apr 02		
87	Naval Air Weapons Station, China Lake, CA	04	68937	L	1	RASO	EXISTING	15 Apr 97	15 Apr 02		
88	Naval Mobile Construction Battalion FORTY, Port Hueneme, CA	04	55448	I	1	RASO	EXISTING	15 May 97	15 May 02		
89	Navy EOD Technical Center, Indian Head, MD	19	0464A	W	1	RASO	EXISTING	24 May 99	24 May 02		
90	Naval Surface Warfare Center, Indian Head Division, Silver Spring, MD	19	00174	S	1	RASO	EXISTING	26 May 99	25 May 02		
91	Naval Undersea Warfare Center Division, Keyport, WA	46	00253	B	1	RASO	EXISTING	26 May 99	26 May 02		
92	Naval Ocean Processing Facility, Whidbey Island, WA	46	68844	B	1	RASO	EXISTING	27 May 99	26 May 02		
93	Naval Postgraduate School, Monterey, CA	04	62271	F	1	RASO	EXISTING	16 Jun 99	15 Jun 02		
94	Naval Command, Control and Ocean Surveillance Center, ISE, East Coast Division, North	39	65236	C	2	RASO	EXISTING	16 Jul 99	15 Jul 02		
95	Naval Hospital, Charleston, SC	39	68084	1	1	NEHC	EXISTING	21 Jul 99	21 Jul 02		
96	Naval Sea Systems Command, Washington, DC	45	00024	T	1	RASO	EXISTING	03 Aug 99	03 Aug 02		
97	US Naval Academy, Annapolis, MD	19	00161	B	1	RASO	EXISTING	10 Aug 99	09 Aug 02		
98	Naval Submarine Support Facility, New London, CT	06	68316	C	1	RASO	EXISTING	11 Aug 99	10 Aug 02		
99	Naval Supply Systems Command, Mechanicsburg, PA	37	00023	T	2	RASO	EXISTING	10 Aug 99	10 Aug 02		
100	Naval Supply Systems Command, Mechanicsburg, PA	37	00023	T	1	RASO	EXISTING	10 Aug 99	10 Aug 02		
101	Naval Hospital, Bremerton, WA	46	68095	1	1	NEHC	EXISTING	13 Aug 99	13 Aug 02		
102	Naval Hospital, Pensacola, FL	09	00203	1	1	NEHC	EXISTING	18 Aug 99	18 Aug 02		
103	Naval Undersea Warfare Center Division, Keyport, WA	46	00253	J	1	RASO	EXISTING	22 Aug 96	22 Aug 02		
104	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	C	1	RASO	EXISTING	27 Aug 99	26 Aug 02		

LISTING OF CURRENT NRMPs (SORTED BY INSPECTION TARGET DATE)
 NRC SUGGESTED INSPECTION WINDOW: (FREQUENCY OF 1 to 3 YEARS +/- 25%)
 (FREQUENCY OF 5 YEARS OR GREATER +/- 1 YEAR)

#	ACTIVITY	STATE	UIC	TYPE CODE	USE CODE	NEHC RASO	EXISTING/NEW ISSUE	LAST INSPECTION	TARGET DATE	OVERDUE (*)	INSPECTIONS SCHEDULED OR COMMENTS
105	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	T	1	RASO	EXISTING	27 Aug 99	26 Aug 02		
106	Navy Mobile Construction Battalion ONE THIRTY-THREE	23	55451	I	1	RASO	EXISTING	09 Sep 97	09 Sep 02		
107	20th Naval Construction Battalion	23	55460	I	1	RASO	EXISTING	10 Sep 97	10 Sep 02		
108	National Naval Medical Center, Bethesda, MD	19	00168	2	1	NEHC	EXISTING	23 Sep 99	23 Sep 02		
109	Naval Shipyard, Norfolk, VA	45	00181	C	1	RASO	EXISTING	15 Oct 99	14 Oct 02		
110	Naval Medical Center, Portsmouth, VA	45	00183	1	1	NEHC	EXISTING	15 Oct 99	15 Oct 02		
111	Naval Air Weapons Station, China Lake, CA	04	68937	J	1	RASO	EXISTING	28 Oct 96	28 Oct 02		
112	Naval Shipyard & Intermediate Maintenance Facility, Pearl Harbor, HI	53	32253	C	1	RASO	EXISTING	05 Nov 99	04 Nov 02		
113	Navy Mobile Construction Battalion FOUR, Port Hueneme, CA	04	55114	I	1	RASO	EXISTING	07 Nov 97	07 Nov 02		
114	Naval Air Warfare Center, Aircraft Division, Patuxent River, MD	19	00421	W	2	RASO	EXISTING	16 Nov 99	15 Nov 02		
115	Naval Oceanographic Office, Stennis Space Center, MS	23	62306	B	2	RASO	EXISTING	17 Nov 99	16 Nov 02		
116	Navy Mobile Construction Battalion ONE	23	55101	I	1	RASO	EXISTING	24 Nov 97	24 Nov 02		
117	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	B	1	RASO	EXISTING	03 Dec 99	02 Dec 02		
118	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	Q	1	RASO	EXISTING	03 Dec 99	02 Dec 02		
119	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	W	1	RASO	EXISTING	03 Dec 99	02 Dec 02		
120	20th Naval Construction Regiment, Gulfport, MS	23	55460	J	1	RASO	EXISTING	10 Dec 96	10 Dec 02		
121	Public Works Center, Washington Navy Yard, Washington, DC	08	68925	J	1	RASO	EXISTING	11 Dec 96	11 Dec 02		
122	Navy Mobile Construction Battalion THREE, Port Hueneme, CA	04	55103	I	1	RASO	EXISTING	12 Feb 98	12 Feb 03		
123	Naval Construction Battalion Center, Port Hueneme, CA	04	62583	R	1	RASO	EXISTING	01 May 96	02 May 03		
124	Naval Sea Systems Command Detachment, Radiological Affairs Support Office, Yorktown,	45	45650	N	1	RASO	EXISTING	26 Sep 96	26 Sep 03		
125	Naval Sea Systems Command Detachment, Radiological Affairs Support Office, Yorktown,	45	45650	N	2	RASO	EXISTING	26 Sep 96	26 Sep 03		
126	Construction Battalion Unit 406, Naval Air Station, Lemoore, CA	04	66650	I	1	RASO	EXISTING	07 Oct 98	07 Oct 03		
127	Marine Corps Air Station, Yuma, AZ	03	62974	J	1	RASO	EXISTING	04 Dec 97	04 Dec 03		
128	Naval Air Warfare Center, Aircraft Division, Patuxent River, MD	19	00421	J	1	RASO	EXISTING	19 Mar 98	18 Mar 04		
129	Naval Surface Warfare Center, Crane Division, Crane, IN	13	00164	L	1	RASO	EXISTING	27 Aug 99	26 Aug 04		
130	Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA	45	00178	J	1	RASO	EXISTING	20 Oct 98	19 Oct 04		

LISTING OF CURRENT NRMPs (SORTED BY INSPECTION TARGET DATE)
 NRC SUGGESTED INSPECTION WINDOW: (FREQUENCY OF 1 to 3 YEARS +/- 25%)
 (FREQUENCY OF 5 YEARS OR GREATER +/- 1 YEAR)

#	ACTIVITY	STATE	UIC	TYPE CODE	USE CODE	NEHC RASO	EXISTING/NEW ISSUE	LAST INSPECTION	TARGET DATE	OVERDUE (*)	INSPECTIONS SCHEDULED OR COMMENTS
131	Navy Environmental and Preventive Medicine Unit #5, San Diego, CA	04	0546A	7	2	NEHC	EXISTING	01 Dec 97	30 Nov 04		
132	Navy Environmental Preventive Medicine Unit #6, Pearl Harbor, HI	53	0545A	7	1	NEHC	EXISTING	26 Jan 98	26 Jan 05		
133	Naval Facilities Engineering Service Center, Port Hueneme, CA	04	0537A	K	1	RASO	EXISTING	06 May 98	06 May 05		
134	Public Works Center, San Diego, CA	04	63387	J	1	RASO	EXISTING	24 Jun 99	23 Jun 05		
135	Marine Corps Base Hawaii, Kaneohe Bay, HI	53	00334	J	1	RASO	EXISTING	16 Aug 99	15 Aug 05		
136	Naval Intermediate Maintenance Activity, Pacific Northwest, Silverdale, WA	46	68438	J	1	RASO	EXISTING	26 Aug 99	25 Aug 05		
137	Naval Air Station, Key West, FL	09	00213	J	1	RASO	EXISTING	23 Sep 99	22 Sep 05		
138	Naval Air Station Joint Reserve Base, New Orleans, LA	17	00206	J	1	RASO	EXISTING	16 Nov 99	15 Nov 05		
139	Public Works Center, Norfolk, VA	45	00187	J	1	RASO	EXISTING	14 Jan 00	13 Jan 06		



Recovery of Depleted Uranium (DU)
At Inner Training Range,
Vieques, Puerto Rico

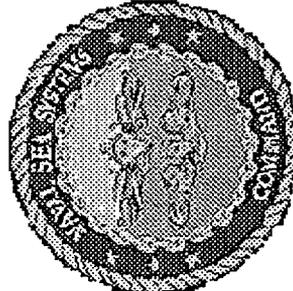
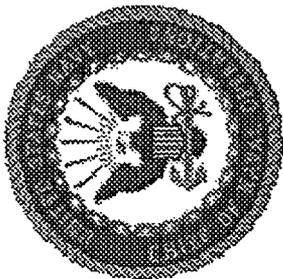
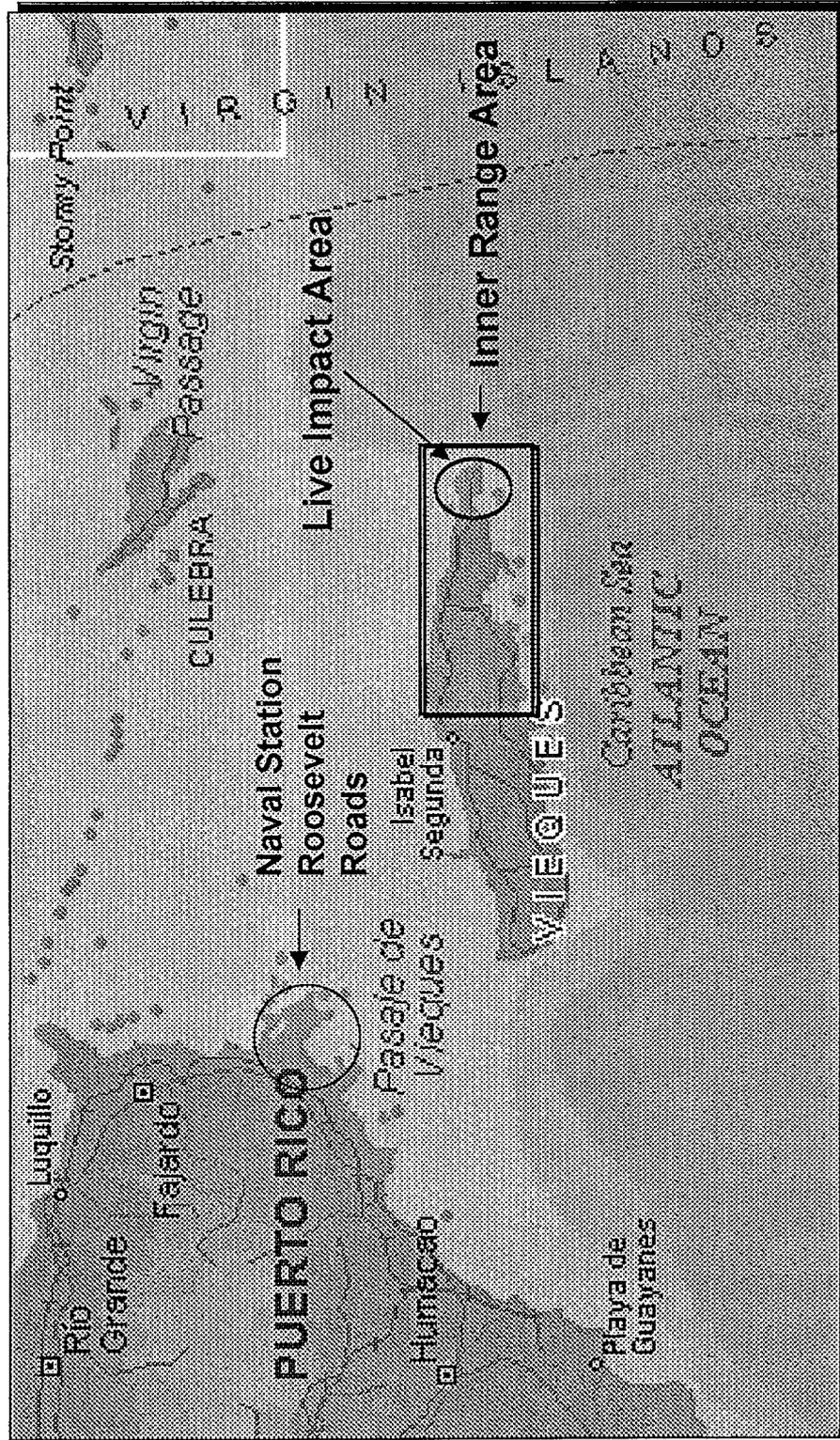
CDR D. Farrand, MSC, USN
(NAVSEA-04N)

Background



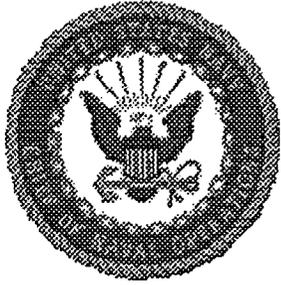
- February 19, 1999.
- Two U.S. Marine Corps A/V-8 Harriers inadvertently fired 263 rounds of 25mm depleted uranium (DU) ammunition.
- Live Impact Area (LIA), Atlantic Fleet Weapons Training Facility (AFWTF) on the island of Vieques, Puerto Rico.
- NRSC and NRC Notified on March 5, 1999.

Inner Training Range, Vieques



North Convoy Area

March 1999

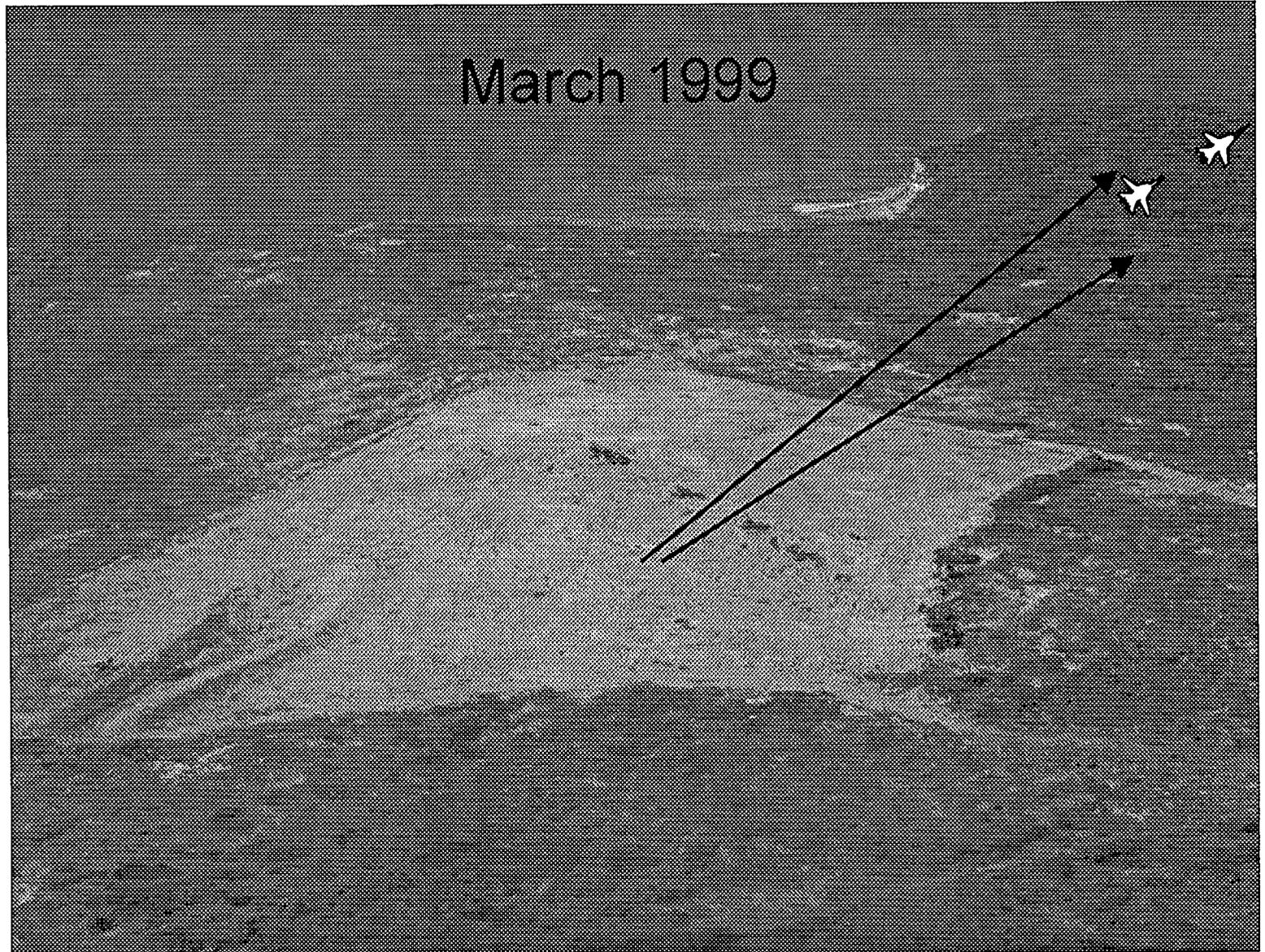


North Convoy Area

March 1999

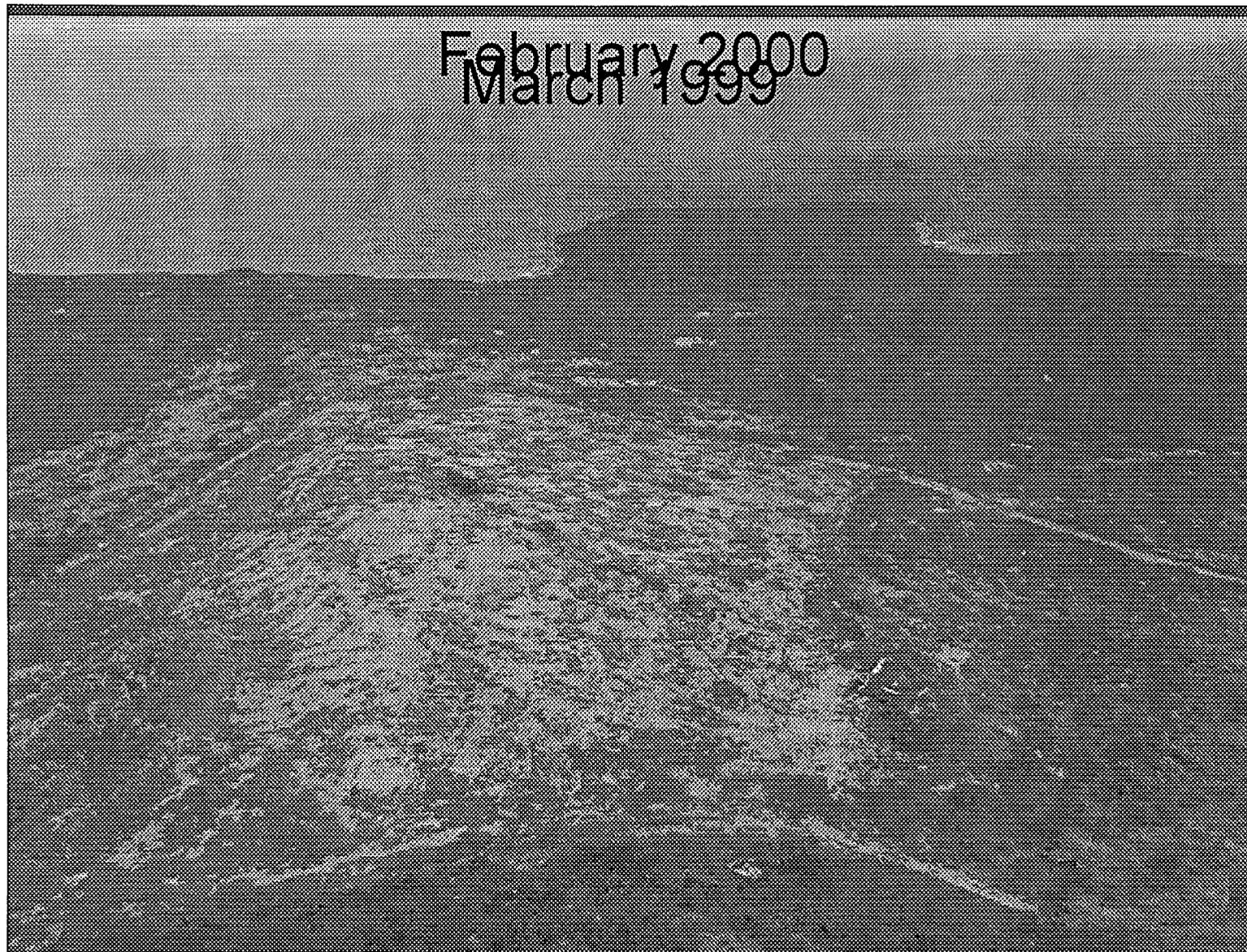


North Convoy Area

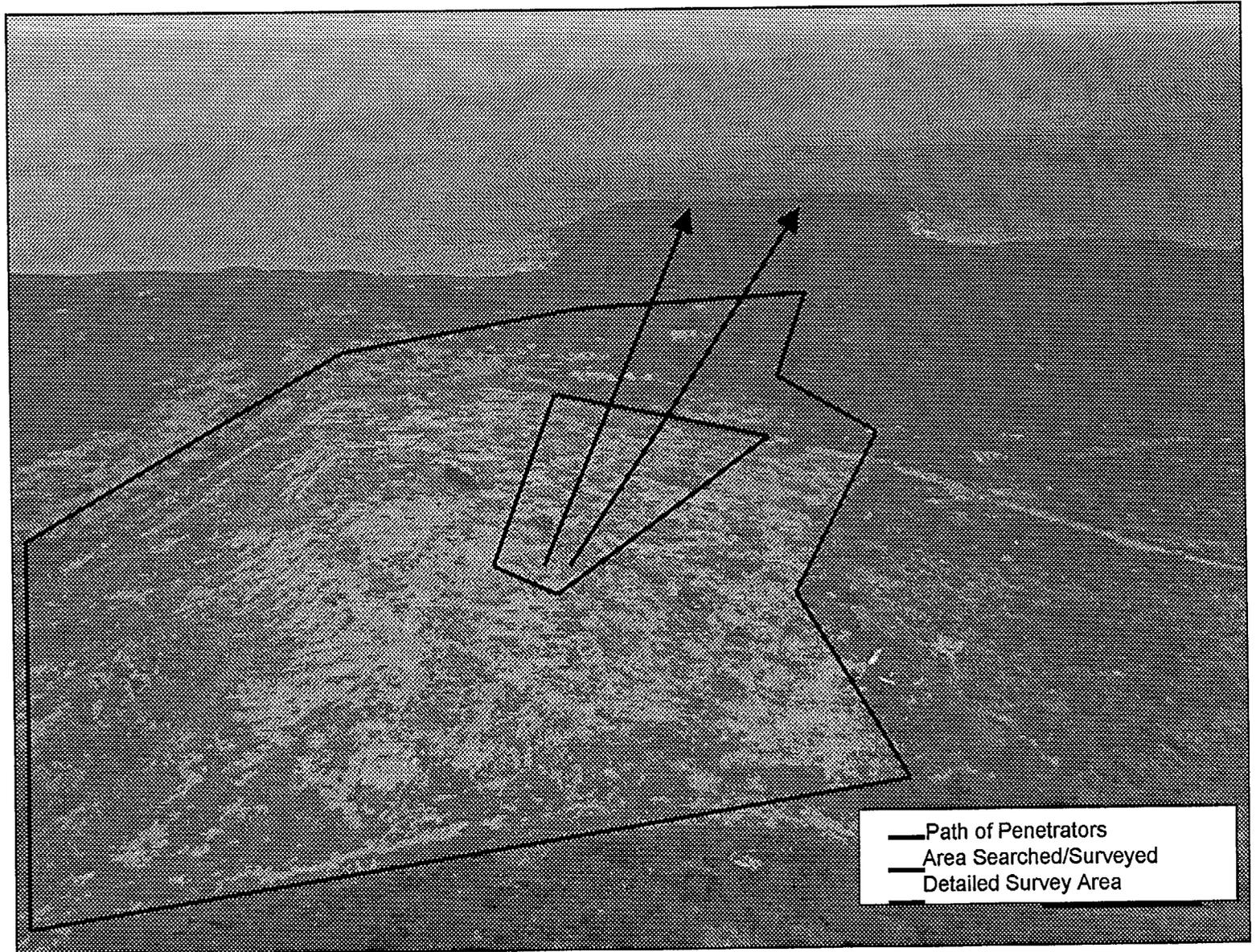
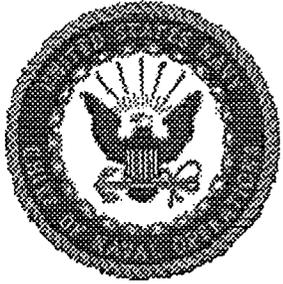


North Convoy Area

February 2000
March 1999

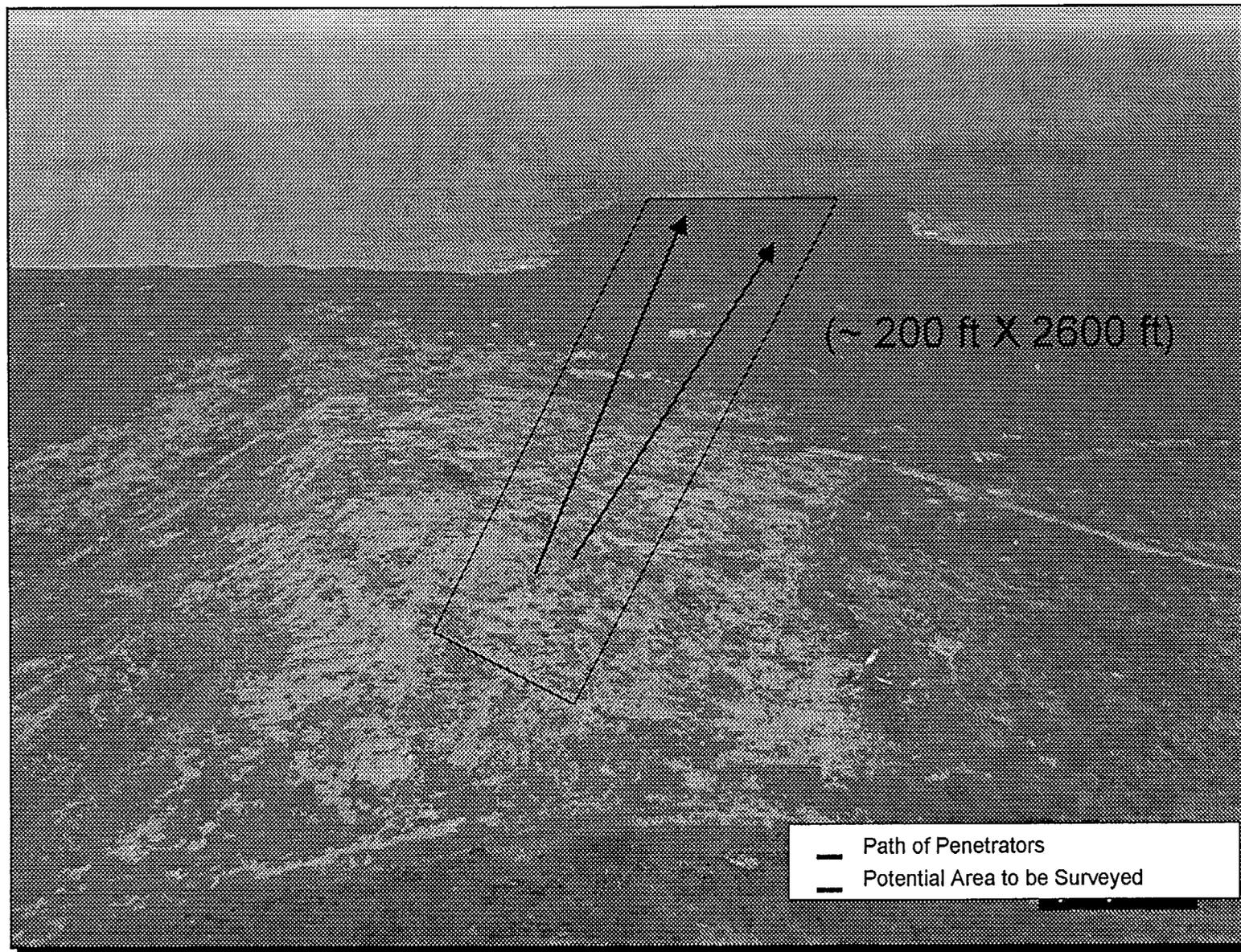


Previous Survey - North Convoy Area



— Path of Penetrators
- - - Area Searched/Surveyed
— Detailed Survey Area

Affected Area - North Convoy



— Path of Penetrators
— Potential Area to be Surveyed



Logistics Meeting

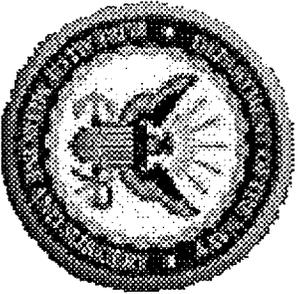
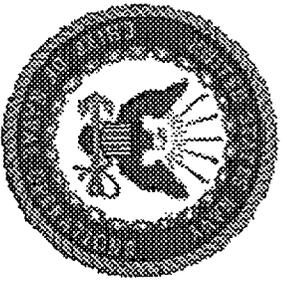
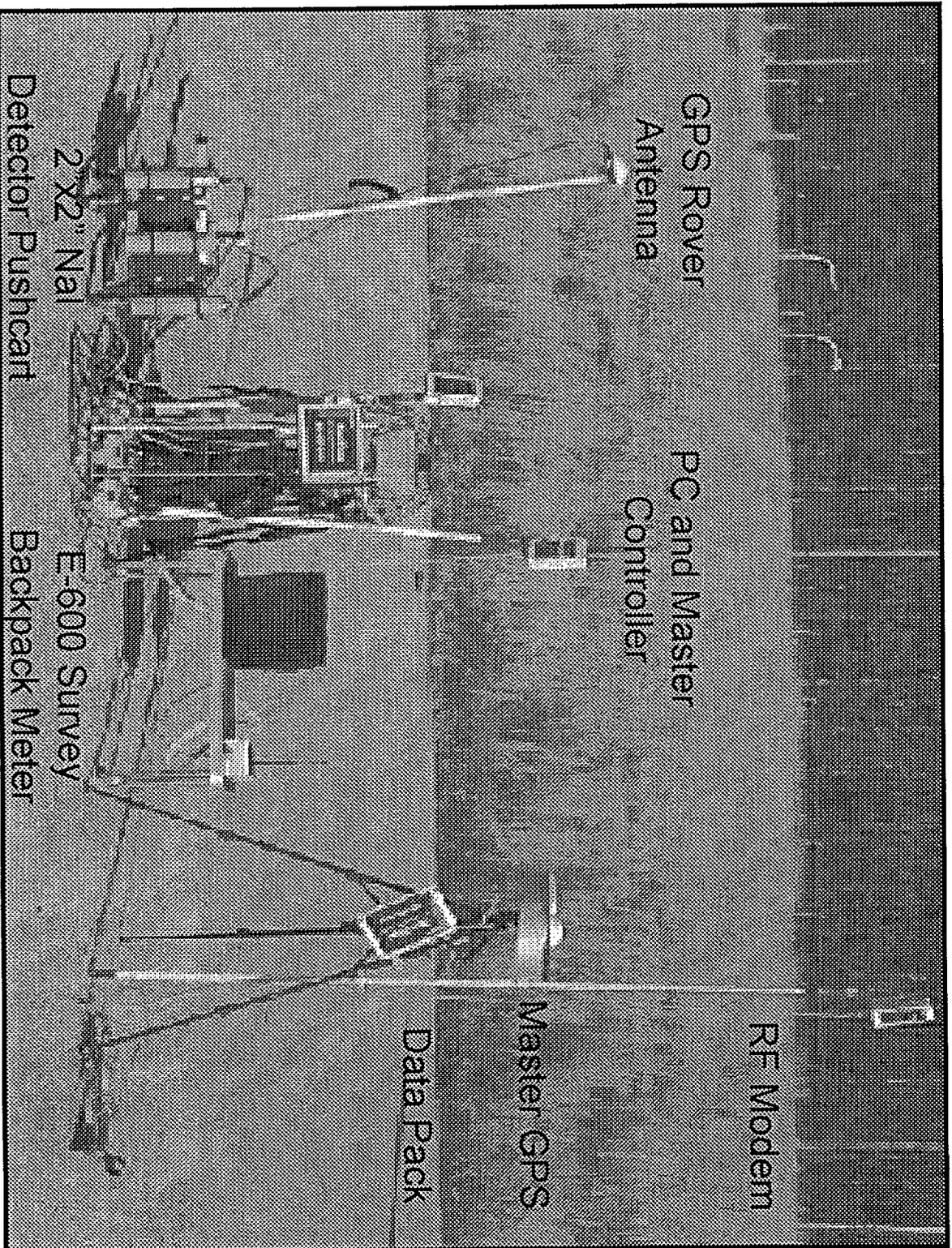
- 24 Feb 00 - AFWTF (NSRR) Hosted
- Formalized Requirements & Procedures
 - Equipment & Storage
 - Waste Storage
 - Personnel
 - Training
 - Brush Removal
- Follow Normal Range Refurbishment Protocols - add Survey Requirements

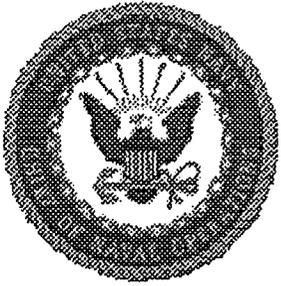
Brush Removal

- Brush Hog with Articulated Arm
- Grass Trimmers
- Machetes



Radiological Scan Survey Equipment

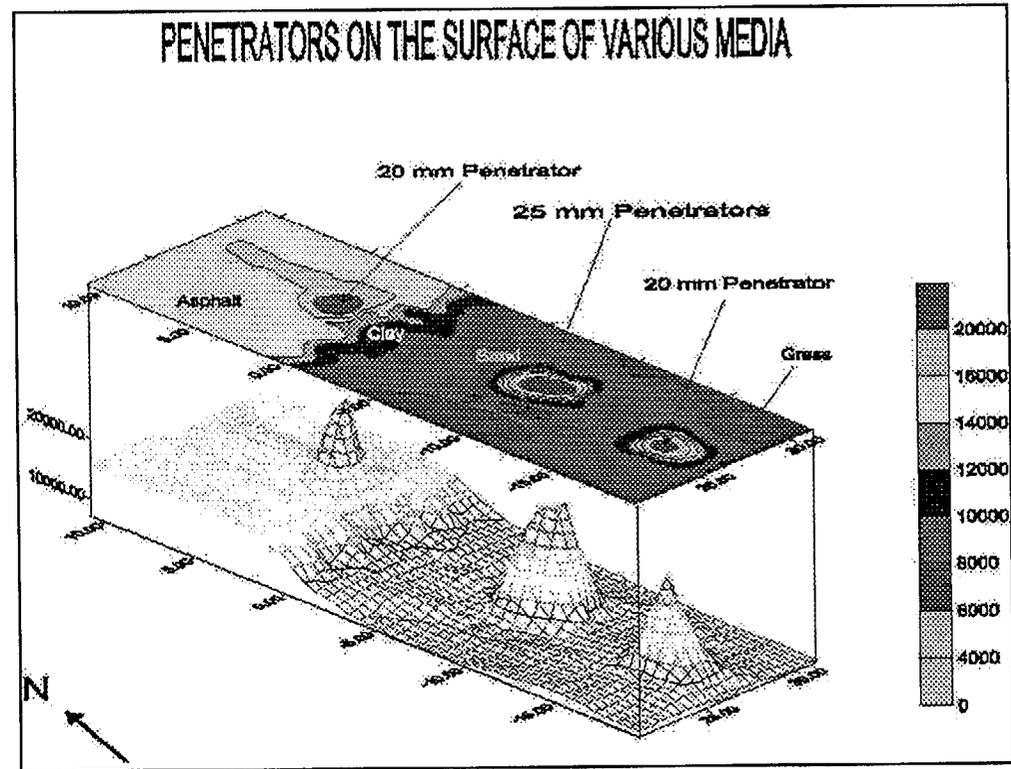
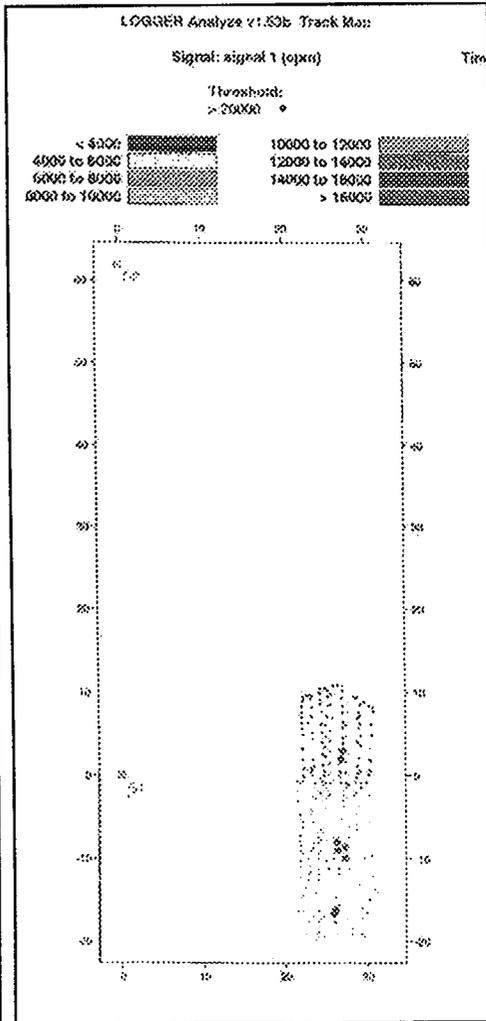




Radiological Scan Survey Equipment

- Scan Survey Equipment Combines:
 - Global Positioning System (GPS)
Accurate to Within 6 to 18 Inches
 - NAVTRACK 2200
Data Management System
 - Eberline E-600 Survey Meters and
SPA-3, NaI 2"x2" Detectors

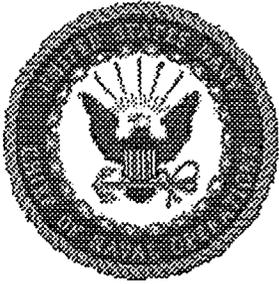
Graphical Data Analysis





Recovery & Survey Procedures

- EOD Safe Range
- Survey Immediate Area Before Blow-Up In Place (BIP) UXO
- Scoping Survey to Refine Affected Area
- Remove any Penetrators Found
- Cut Vegetation to Less Than 4 Inches High



Recovery & Survey Procedures

- Detailed Survey - USRADS (GPS)
- Analyze Results and Investigate Suspect Areas
- Remove any Penetrators Found
- Re-survey Area
- Prepare and Submit Report to NRC