



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

IN REPLY REFER TO

5720  
Ser N455/1U595487  
June 5, 2001

Mr. Kyle Kajihiro  
2426 Oahu Avenue  
Honolulu, HI 96822

Dear Mr. Kajihiro:

As previously advised by the Commander, Navy Region Hawaii, your Freedom of Information Act (FOIA) request of February 20, 2001, in which you seek "all files, records, and documents possessed by the U.S. Pacific Command which relate to the processing, manufacturing, use, testing, storage, disposal, accidental release, and/or remediation of depleted uranium munitions and/or armored vehicles at U.S. military bases and training areas in the Pacific Command Area of Responsibility" was referred to this office for action. Our case number is 200100931.

I conducted a search of my files that took 6 hours. The only information I could locate was on Lualualei, HI as described below:

Attachment 1 forwards excerpts from the Radiological Affairs Support Program Manual, Section X, Source Material, Depleted Uranium. The manual discusses depleted uranium, it's uses in Navy and Marine Corps, disposition, and legal requirements for handling depleted uranium (DU). Title 10, Code of Federal Regulations, Part 40.13(c)(5)(iv) prohibits the processing or refining of source material and specifically depleted uranium.

Attachment 2 forwards the Naval Radioactive Materials Permit (NRMP) 13-00164-LINP, for depleted uranium alloy. The only use authorized for depleted uranium within Navy or Marine Corps is:

"For storage as war reserve material. CIWS (20mm) ship-board ammunition may be utilized at sea for Pre Action Calibration and Alignment (functionality/serviceability) firing as specified in Crane letter 5104 Ser 4012/7028 of 21 July 1997.

Live fire training exercises of DU will only be conducted at facilities specifically authorized to

SUBJECT: REQUEST FOR INFORMATION UNDER THE FREEDOM OF  
INFORMATION ACT

conduct such firings under separate radioactive  
material permits or NRC licenses.

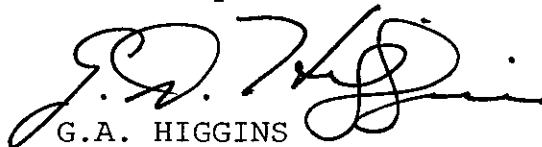
Rework or demilitarization of DU munitions and the use  
of any material in any chemical, metallurgical or  
nuclear process is not authorized under this."

Attachment 3 forwards excerpts from the Naval Radioactive  
Materials Permit (NRMP) 13-00164-LINP, For Navy and Marine Corps  
Depleted Uranium Ammunition. Specifically, the appropriate  
section pertaining to authorized use and possession is enclosed  
which lists Naval Magazine Lualualei by name. In addition, all  
munitions containing depleted uranium are listed, but not all  
are stored at Naval Magazine Lualualei, Hawaii.

Attachment 4 forwards a naval message Date/Time/Group  
132025Z JUL 94, reporting an inadvertent discharge of a Close-  
In-Weapons-System (CIWS) onboard the USS LAKE ERIE, CG 70, on  
May 4, 1994, in Pearl Harbor, HI, in which two depleted uranium  
rounds were fired. This information was reported to the Nuclear  
Regulatory Commission on May 5, 1994, and the two rounds were  
never recovered.

I have waived the fees associated with the processing of your  
request in this instance.

Sincerely,

A handwritten signature in black ink, appearing to read "G.A. Higgins", is written over the typed name.

G.A. HIGGINS  
Captain, Medical Service Corps  
United States Navy  
Executive Secretary,  
Naval Radiation Safety Committee

Attachments:

1. Radiological Affairs Support Program Manual
2. Naval Radioactive Materials Permit (NRMP) 13-00164-LINP
3. NRMP 13-00164-LINP Navy and Marine Corps DU Ammunition
4. Naval Message Date/Time/Group 132025Z Jul 94

# RADIOLOGICAL AFFAIRS SUPPORT PROGRAM MANUAL



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PUBLISHED BY DIRECTION OF COMMANDER, NAVAL SEA SYSTEMS COMMAND

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1 OCTOBER 1991

**SECTION X**  
**SOURCE MATERIAL**

**10.1 DEPLETED URANIUM**

**DISCUSSION:**

Depleted Uranium (DU) is a heavy metal used as ballast or counterweights in aircraft gyroscope assemblies, flight control surfaces, helicopter blade assemblies, elevator balance assemblies, aileron balance assemblies, etc., in aircraft, rockets, projectiles, and missiles; and as penetrators in certain ammunition. DU is natural uranium that has most of the uranium-235 and uranium-234 atoms removed.

**10.1.1 DEPLETED URANIUM COUNTERWEIGHTS**

**DISCUSSION:**

Plated DU counterweights for use in aircraft are manufactured and distributed under a general NRC license granted in 10 CFR 40.13(5) and therefore do not require a NRMP. The general license prohibits chemical, physical, or metallurgical treatment or processing of counterweights other than repair or restoration of the plating or covering on the counterweight. Any use of these counterweights other than for their intended purpose in aircraft requires the issue of a specific NRMP. Personnel involved in the handling, use and distribution of these counterweights shall comply with the radiological control requirements of this manual.

**REQUIREMENTS:**

1. DU counterweights shall only be used as counterweights in Navy and Marine Corps aircraft and they shall never be transferred to personnel or organizations for any purpose other than use in aircraft.
2. DU counterweights shall not physically be transferred to Defense Reutilization Marketing Offices (DRMOs) for resale. Aircraft parts such as wings and helicopter blades containing DU counterweights shall be stripped of counterweights prior to disposal or resale by DRMOs.
3. No attempt shall be made to clean corrosion from DU counterweights. DU counterweights with corroded surfaces or chipped or peeled cladding shall be painted to seal the material, placed in plastic bags and returned to a manufacturer for repair or disposal. When replacement counterweights are not available, the counterweight shall be painted to seal potential contamination and the counterweight may be reinstalled on the aircraft until a replacement is available.

4. When performing work on aircraft where DU counterweights are close (less than 36 inches) to the eyes or trunk of the body, exposures shall be minimized by either removing the counterweight from the aircraft or shielding it by placing lead foil over the counterweight.

5. Corroded or damaged counterweights may be returned to an authorized manufacturer for repair or disposal in accordance with paragraph 7 below.

6. DU counterweights which are in serviceable condition may be returned to an authorized manufacturer for disposal in accordance with paragraph 7 below provided:

a. The counterweights have been offered for use by other Navy and Marine Corps aviation units operating or repairing similar aircraft.

b. The counterweights have been offered for use by other U.S. armed forces operating or repairing similar aircraft.

7. NAVSEADET RASO shall provide specific authorization for all transfers of counterweights from Navy and Marine Corps activities to any civilian activity. Requests for authorization to transfer counterweights to a manufacturer shall be submitted to NAVSEADET RASO by letter or message. Upon receipt of a transfer authorization request, NAVSEADET RASO shall provide packaging, marking, documentation and transportation requirements for the specific shipment. Upon assurance that all NRC and DOT regulations are met, NAVSEADET RASO shall provide authorization for shipment of the counterweights to a specific manufacturer.

#### **10.1.2 DEPLETED URANIUM PROJECTILES**

##### **DISCUSSION:**

The Navy and Marine Corps use DU projectiles in 20mm CIWS rounds, 30mm GAU 12 aircraft rounds, 105mm and 120mm artillery projectiles. These DU sources are not exempt from NRC licensing requirements but are used under a specific NRMP. The NRMP is issued to the item manager (Naval Weapons Support Center, Crane) and not to each command which stores or uses the projectiles.

##### **REQUIREMENTS :**

1. The item manager shall maintain a NRMP for storage, handling and transportation of DU ammunition.

2. The item manager shall provide copies of the approved NRMP to each Navy and Marine Corps command which will handle, store and transport the DU ammunition.

3. Navy and Marine Corps commands which store, or handle DU ammunition shall comply with all requirements contained in the applicable NRMP.

4. DOT exemptions shall constitute exemption from transportation requirements of this manual.

### **10.1.3 OTHER DEPLETED URANIUM SOURCES**

#### **REQUIREMENT:**

All other uses of DU which are not exempted in 10 CFR 40.13 or authorized on a general license in 10 CFR 40.22 shall require a NRMP to be issued prior to possession and use.

# NAVAL RADIOACTIVE MATERIALS PERMIT

Pursuant to the authority stated in OPNAVINST 6470.3, Naval Radiation Safety Committee, and in reliance on statements made by the applicant, permission is hereby granted for the acquisition, receipt, possession, use, storage and disposal of radioactive materials listed below subject to the conditions listed in this permit.

<b>1 - COMMAND</b>  COMMANDER CRANE DIVISION NAVAL SURFACE WARFARE CENTER 300 HIGHWAY 361 CRANE, IN 47522-5001	<b>2 - PERMIT NO.</b> 13-00164-L1NP
	<b>3 - AMENDMENT NO.</b> 2
	<b>4 - DOCKET NO.</b>
	<b>5 - EXPIRATION DATE</b> 31 AUGUST 2002

**6 - RADIOACTIVE MATERIAL**

A. Uranium

**7 - CHEMICAL/ PHYSICAL FORM**

A. Depleted uranium (DU) alloy penetrators in munitions

**8 - MAXIMUM QUANTITY AUTHORIZED**

A. Not to exceed 5,000,000 Kilograms.

**9. Authorized Use**

A. For storage as war reserve material. CIWS (20mm) shipboard ammunition may be utilized at sea for Pre Action Calibration and Alignment (functionality/serviceability) firing as specified in Crane letter 5104 Ser 4012/7028 of 21 July 1997.

10. Live fire training exercises of DU munitions will only be conducted at facilities specifically authorized to conduct such firings under separate radioactive material permits or NRC licenses.
11. Rework or demilitarization of DU munitions and the use of any material in any chemical, metallurgical or nuclear process is not authorized under this.

NAVAL RADIATION SAFETY COMMITTEE

Radioactive Materials PermitPERMIT NO.  
13-00164-L1NP  
AMENDMENT NO.2

## CONDITIONS

12. Radioactive material shall be stored at Department of Defense facilities, Host Nations or aboard U.S. Navy ships.
13. The Radiation Safety Officer for the activities authorized by this permit is Harold M. Qualkenbush. The Assistant Radiation Safety Officer for the activities authorized by this permit is Eric G. McQueen.
14. The command's Radioactive Materials Permit applications along with submitted procedures and information contained in the application package are considered an integral part of this Permit. The command shall maintain a copy of its application package on file with this Naval Radioactive Materials Permit.
15. The command shall comply with and maintain current copies of the following:
  - a. Title 10, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections", Part 20, "Standards for Protection Against Radiation", Part 21 "Reporting of Defects and Noncompliance", Part 40, "Domestic Licensing of Source Material", and Part 71, "Packaging and Transportation of Radioactive Material". (R)
  - b. Title 49, Code of Federal Regulations, Parts 171-180, "Hazardous Materials Regulations".
  - c. OPNAVINST 6470.3, Naval Radiation Safety Committee.
  - d. NAVMED P-5055, Radiation Health Protection Manual.
  - e. OPNAVINST 3100.6, Special Incident Reporting Procedures.
  - f. NAVSEA S0420-AA-RAD-010, Radiological Affairs Support Program Manual.



## Naval Radiation Safety Committee

Radioactive Materials Permit

PERMIT NO.  
13-00164-L1NP  
AMENDMENT NO.  
2

## CONDITIONS (Continued)

16. The command shall maintain records for review by the Naval Radiation Safety Committee sufficient to document operational compliance with the above requirements and other conditions of this Permit.
17. Commanders of Navy and Marine Corps facilities that store DU munitions shall designate an individual in writing, to be responsible for the radiological safety aspects of DU munitions.
18. The command shall conduct and reconcile a physical inventory every twelve months to account for all sources received, transferred and possessed under this permit. (R)  
Records of inventories shall be maintained for five years from the date of each inventory.
9. Transportation of radioactive material authorized by this permit shall be accomplished as specified in Crane letter 5104 Ser 4012/7028 of 21 July 1997 as long as DOT-E 9649 is in effect (current expiration date is 31 December 1998). If DOT-E 9649 is allowed to expire or is not renewed for any reason, transportation of the radioactive material will be in compliance with 49 CFR 173.
20. Notification of radiation incidents as defined in 10 CFR 20.2202, notification of a defect or failure to comply as defined in 10 CFR 21, notification of excessive radiation levels or contamination on packages monitored pursuant to 10 CFR 20.1906, notification of theft or loss of radioactive material under circumstances which may result in exposure to persons in unrestricted areas as defined in 10 CFR 20.2201 or notification of incidents defined in 10 CFR 30.50 shall be made by OPREP-3 NAVY BLUE REPORT in accordance with OPNAVINST 3100.6. NAVSEASYS COM (SEA-04N) and NAVSEADET RASO will be information addressees to the OPREP-3 NAVY BLUE REPORT. Notification shall be in lieu of any notification required by 10 CFR.

## SUPPLEMENTARY SHEET

## Naval Radiation Safety Committee

Radioactive Materials Permit

PERMIT NO.  
13-00164-L1NP  
AMENDMENT NO.

2

## CONDITIONS (Continued)

21. Notification of exposures, radiation levels, and concentrations of radioactive material exceeding the limits defined in 10 CFR 20.2203, theft or loss of radioactive material defined in 10 CFR 20.2201, and follow-up reports required by 10 CFR 30.50 shall be reported in writing within 15 days to CNO (N45), NAVSEASYS COM (SEA-04N) and NAVSEADET RASO. Notification to addressees above shall be in lieu of any notification required by 10 CFR.
22. Except as specifically provided otherwise by this permit, the command shall conduct its program in accordance with the statements, representations, and procedures contained in the documents including any enclosures listed below. The Nuclear Regulatory Commission's regulations shall govern unless the statements, representations and procedures in the command's application and correspondence are more restrictive than the regulations.
- a. Letters: 5104 Ser 4012/4011 of 27 Sep 94 and 5104 Ser 4012/7028 of 21 July 1997.

DATE:

28 Jul 98

P. K. BLAKE  
Captain, MSC, USN  
Executive Secretary  
Naval Radiation Safety  
Committee

NAVAL RADIOACTIVE MATERIALS PERMIT

NO. 13-00164-L1NP

FOR

NAVY AND MARINE CORPS  
DEPLETED URANIUM AMMUNITION



CRANE DIVISION  
NAVAL SURFACE WARFARE CENTER  
300 HIGHWAY 361  
CRANE, INDIANA 47522-5000

NAVAL RADIOACTIVE MATERIALS PERMIT NO. 13-00164-L1NP

Keyed to NRC Form 313  
via Supplement Number to  
NRMP 13-00164-L1NP / August 94

SUPPLEMENT 1

REFERENCE: NRC FORM 313, BLOCK 3

ADDRESS(ES) WHERE THE LICENSED MATERIAL WILL BE USED OR POSSESSED

A. This NRMP provides for long-term i.e., war reserve and short term i.e., unit basic load, worldwide storage, handling and transportation of Navy and Marine Corps Depleted Uranium (DU) Munitions at selected Department of Defense (DOD) facilities within the United States (US) and selected DOD and Host Nation Facilities Outside the US authorized for the storage of conventional munitions by the DOD. Appendix 1 identifies current shore storage locations. Storage locations of Navy and Marine Corps DU munitions are as determined by Navy and Marine Corps mission. Therefore, any DOD or Host Nation Facility authorized to store conventional ammunition may be designated as an authorized DU munitions storage site, once determined to be mission essential to the Navy.

B. Navy and Marine Corps DU munition assets in the custody of Army, Air Force and other DOD ammunition storage activities are not considered to be in Navy possession. Storage of the DU munitions at these sites is authorized under the other services' permit or NRC license. DU munitions in Navy and Marine Corps custody that are logistically controlled by another DOD service are considered to be covered by this permit for possession only.

C. DU munitions may be loaded in transportation conveyances i.e., vehicles, aircraft, and vessels in direct or indirect support of Navy or Marine Corps operations and mission assignments i.e., support of readiness, training, deployment, and combat.

D. DU munitions will be stored in locations appropriate for conventional ordnance in accordance with NAVSEA OP-4, NAVSEA OP-5 and NAVSEA SWO20-AC-SAF-010 series requirements.

NAVSURFWARCENDIV CRANE  
ADDRESS(ES) WHERE THE LICENSED MATERIAL WILL BE USED OR POSSESSED  
Page-1

APPENDIX 1  
TO SUPPLEMENT 1,  
NRC FORM 313, BLOCK 3

CURRENT AMMUNITION STORAGE LOCATIONS	
COMMAND: CINCLANTFLT	ACTIVITIES: NAVSTA MAYPORT NAVPHIBASE LITTLE CREEK NAVSTA PASCAGOULA NAVSTA ROOSEVELT ROADS NAS BRUNSWICK NAS NORFOLK
COMMAND: CINCPACFLT	ACTIVITIES: NAVSTA GUAM NAVMAG LUALUALEI COMFLEACT SASEBO COMFLEACT OKINAWA COMFLEACT YOKOSUKA NAS ALAMEDA NASUPPFAC DIEGO GARCIA NAS NORTH ISLAND COMNAVFOR KOREA POHANG
COMMAND: CINCUSNAVEUR	ACTIVITIES: NAVSTA ROTA NATO DEPOT AUGUSTA BAY NATO DEPOT SOUDA BAY
COMMAND: EMC	ACTIVITIES: MCAS YUMA
COMMAND: COMNAVAIRWARSSYSCOM	NAVAIRWARCENWEP DIV CHINA LAKE
COMMAND: NAVSEASYSYSCOM	NAVSURFWARCEN DIV DAHLGREN NAVORDCENPAC DIV DET FALLBROOK NAVORDCENPAC DIV DET PORT HADLOCK WPNSTA CHARLESTON WPNSTA SEAL BEACH WPNSTA CONCORD WPNSTA YORKTOWN WPNSTA EARLE COLTS NECK
COMMAND: US ARMY	CRANE ARMY AMMUNITION ACTIVITY MCALISTER ARMY AMMUNITION PLANT HAWTHORNE ARMY AMMUNITION PLANT LETTERKENNY ARMY DEPOT

Keyed to NRC Form 313  
via Supplement Number to  
NRMP 13-00164-L1NP / August 94

SUPPLEMENT 2

REFERENCE: NRC FORM 313, BLOCK 5

RADIOACTIVE MATERIAL

A. Depleted Uranium (DU) metal alloy (Containing not less than 95 percent U-238) as a component part of ammunition cartridges.

B. This permit application covers various types of DU munitions used within the Navy and Marine Corps. A list of Department of Defense DU munitions is provided below. A broad authorization for DU munitions is required to allow rapid processing and movement of Navy and Marine Corps DU munition shipments at any authorized activity as necessary to support storage, rapid deployment or preparation for wartime operations. Amendment of the NRMP is not required solely for the purpose of updating Table 2-1.

C. Current Department of Defense (DOD) ammunition items containing DU components are:

TABLE 2-1

<u>DODIC</u>	<u>NSN</u>	<u>SIZE</u>	<u>MODEL</u>	<u>COMMENTS</u>	<u>DU(kg)</u>
A675	1305-00-193-4227	20mm	MK149	Phalanx	0.07
	1305-01-087-6742	20mm	MK149	Phalanx	0.07
A676	1305-01-185-3265	20mm	MK149 mod2	Phalanx	0.07
A979	1305-01-136-3623	25mm	PGU-20	Harrier	0.148
	1305-01-251-2582	25mm	PGU-20	Harrier	0.148
A983	1305-01-219-7970	25mm	PGU-20	Harrier	0.148
A986	1305-01-304-9977	25mm	M919(1)	Bradley	0.0855
	1305-01-305-8845	25mm	M919	Bradley	0.0855
	1305-01-306-2702	25mm	M919	Bradley	0.0855
	1305-01-348-0192	25mm	M919	Bradley	0.0855
	1305-01-396-8362	25mm	M919	Bradley	0.0855
B102	1305-01-061-2214	30mm	PGU14/B(1)	A-10	0.302
	1305-01-063-2167	30mm	PGU14/B	A-10	0.302
B103	1305-01-056-4626	30mm	PGU14A/B(1)	A-10	0.302

NAVSURFWARCENDIV CRANE  
RADIOACTIVE MATERIAL

	1305-01-056-4907	30mm	PGU14A/B	A-10	0.302
	1305-01-083-5998	30mm	PGU14A/B	A-10	0.302
	1305-01-093-3340	30mm	PGU14A/B	A-10	0.302
	1305-01-095-1062	30mm	PGU14A/B	A-10	0.302
	1305-01-113-2462	30mm	PGU14A/B	A-10	0.302
	1305-01-146-1530	30mm	PGU14A/B	A-10	0.302
	1305-01-157-2627	30mm	PGU14A/B	A-10	0.302
	1305-01-161-0622	30mm	PGU14A/B	A-10	0.302
	1305-01-232-6180	30mm	PGU14A/B	A-10	0.302
	1305-01-225-8202	30mm	PGU14A/B	A-10	0.302
B117	1305-01-057-7912	30mm	PGU14A/B(1)	A-10	0.302
	1305-01-057-7913	30mm	PGU14A/B	A-10	0.302
B128	1305-00-416-5809	30mm	PGU14/B(1)	A-10	0.302
	1305-01-023-1909	30mm	PGU14/B	A-10	0.302
C523	1315-01-082-9856	105mm	M774	tank	3.36
	1315-01-227-0008	105mm	M774	tank	3.36
C524	1315-01-136-9631	105mm	M833	tank	3.67
	1315-01-245-4019	105mm	M833	tank	3.67
C543	1315-01-324-6633	105mm	M900(1)	tank	3.83
C783	1315-01-169-8749	120mm	M827(1)(2)	tank	3.13
C786	1315-01-168-6108	120mm	M829	tank	3.94
	1315-01-226-7418	120mm	M829	tank	3.94
	1315-01-292-7753	120mm	M829(3)	tank	3.94
C380	1315-01-269-2256	120mm	M829A1	tank	4.64
	1315-01-316-1211	120mm	M829A1	tank	4.64
C792	1315-01-361-5023	120mm	M829A2(1)	tank	4.74

NOTES:

- (1) These ammunition items (model numbers) are not owned by the Navy or Marine Corps at the current time.
- (2) No full scale production. Small quantity at U.S. Army Aberdeen Proving grounds, Aberdeen, Maryland.
- (3) Never produced, no current plans to produce.

D. The total quantity of DU required is "5,000,000 Kilograms" in the physical form of Ordnance Penetrators. Operational and budget planning determines the amount and types of munition items required by Navy and Marine Corps to fulfill their assigned missions.

E. This NRMP covers Navy and Marine Corps DU munitions not specifically listed above but, for which Navy and Marine Corps mission assignments may dictate, because of inter-changeability between Gun/Weapon Systems.

Keyed to NRC Form 313  
via Supplement Number to  
NRMP 13-00164-L1NP / August 94

SUPPLEMENT 3

REFERENCE: NRC FORM 313, BLOCK 6

PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED

A. DU munitions will be used as war reserve materials and stored, transported, inspected, deployed for combat use.

B. Manufacturing or processing of DU components will not be accomplished under the provisions of this application. DU components are manufactured by NRC or Agreement State licensed private contractors. Components are loaded, assembled and packaged at ammunition manufacturing plants that are either Government-owned, Contractor-operated (GOCO) or privately-owned, privately-operated (POPO). These operations are performed under separate NRC or Agreement State licenses. The Navy and Marine Corps will receive the munition items with the DU components fully assembled.

C. The DU material will not be used in any chemical, metallurgical or nuclear processes under this permit. Rework or demilitarization of DU munitions will not be performed under this permit.

D. Live fire training exercises of DU munitions will only be conducted at facilities authorized to conduct such firings under separate radioactive material permits or NRC licenses. Firing of DU munitions for training purposes is not authorized under this permit. However, limited test firing of the MK15 PHALANX at sea for functionality/serviceability is authorized. The ships designated Ordnance Officer or Executive Officer shall be responsible for disseminating this information to the appropriate personnel and enforcement of these requirements through their chain of command.

E. Commanders of Navy and Marine Corps shore facilities that store DU munitions shall designate an individual in writing, to be responsible for the radiological safety aspects of DU munitions.

NAVSURFWARCENDIV CRANE  
PURPOSE(S) FOR WHICH LICENSED MATERIAL WILL BE USED  
PAGE-1



H11111  
ROUTINE

REPRODUCED AT GOVERNMENT EXPENSE  
\* UNCLASSIFIED \*  
\*\*\*\*\*

RTTUZYUW RUWFSGG6902 1932025-UUUU--RUERNWC.  
ZNR UUUUU

RUCBLFA T COMMARFORLANT  
RUCKMAA T COMMARFORLANT  
RUCLENOO T CG FOURTH MAW  
RUHQHQC T COMMARFORPAC

R 132025Z JUL 94 ZYB-  
FM USS LAKE ERIE

TO AIG FOUR ZERO TWO

INFO RUCBTFA/COMNAVSURFLANT NORFOLK VA//NO2L/N42/N45/N6/N82//

RUWDEAA/COMNAVSURFPAC SAN DIEGO CA//N443/N814//

RULSDMA/AEGIS PROG MGR WASHINGTON DC//PMS400B/PMS400C/PMS400F//

RULSAAH/NAVSURFWARCENDIV INDIAN HEAD MD//044/610//

RULSAAY/NAVSURFWARCEN WHITE OAK DET SILVER SPRING MD//U32//

RUCOYAO/WPNSTA YORKTOWN VA//04/20/35//

RUWDGCO/WPNSTA SEAL BEACH CA//04/20//

RUWGTFC/WPNSTA CONCORD CA//04/20/30//

RUERNWC/NAVSURFWARCENDIV CRANE IN//04/20//

RUEPNIE/COMRAMCCOM ROCK ISLAND IL//AMSMC-QAS//

RUWDZAE/COMCRUDESGRU ONE

RUHGCDT/COMCRUDESGRU THREE

RHHMMBS/COMNAVBASE PEARL HARBOR HI//00/01//

RHHMMBT/COMNAVSURFGRU MIDPAC//MP00/MP01/MP006//

RHHMPIY/COMDESRON THREE ONE

RULSACZ/AEGIS TRACEN DAHLGREN VA//00//

RUDJABT/SWOSCOLCOM NEWPORT RI//JJJ//

EXPLOSIVE MISHAPS/  
MALFUNCTIONS

PM4

PM4-3

402

402

4022

4022M

4027

405

4052

4056

4064

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10

PAGE 02 RUWFSGG6902 UNCLAS

BT

UNCLAS //NO3020//

MSGID/GENADMIN/LAKE ERIE//

SUBJ/EXPLOSIVE MISHAP REPORT (REPORT SYMBOL DD-FMP(AR)

//1020(5102)//

REF/A/DOC/CNO/93SEP07//

REF/B/DOC/-/94MAY25//

AMPN/REF A IS OPNAVINST 5100.21B, AFLOAT MISHAP INVESTIGATION AND  
REPORTING. REF B IS 25 MAY 1994, INVESTIGATION INTO THE  
CIRCUMSTANCES SURROUNDING THE INADVERTENT FIRING OF THE CLOSE IN

DELIVER TO:

40  
A B ED PA CE OC (PM4 09 11 20) 3025 3046 40 60 70 80 80B CAAA C-XO LTD  
05 052 0551 0552 0556 0557 056 DFFAS CS DRMO EOD MCL NL NX OICC  
NIS NS PSD 06 064 064B 0646 065 (067) 068 069 STLO EVRS GMP

TOR:132124Z JUL 94 \* UNCLASSIFIED \*

ATTACHMENT (4)

R117179  
ROUTINE

\*\*\*\*\*  
\* UNCLASSIFIED \*  
\*\*\*\*\*

WEAPONS SYSTEM (CIWS) MT-22 (PORT) ON BOARD USS LAKE ERIE (CG 701)  
ON 4 MAY 94. THIS REPORT IS FOR OFFICIAL USE ONLY. THIS IS A  
GENERAL USE MISHAP REPORT TO BE USED ONLY FOR SAFETY PURPOSES AS  
DEFINED IN OPNAVINST 5100.21B.//  
POC/DAVIS/LT/808 474-2275/-/TEL: DSN 474-2275//  
RMKS/PART I

ALPHA:

1. UIC: 21827
2. REPORT SERIAL: 001-94
3. LOCAL TIME AND DATE: 1432WQ 4 MAY 94

PAGE 03 RUWFSGG6902 UNCLAS

4. GEOGRAPHIC LOCATION: PIER B-24 NAVSTA PEARL HARBOR HI
5. LOCATION WHERE OCCURRED: 0-4 LEVEL CIWS MT 22, PORT SIDE  
FRAME 245.

6. EVOLUTION: PLANNED MAINTENANCE
7. SHIP STATUS: NORMAL IMPORT WORKDAY

BRAVO: NTR

CHARLIE: NTR

DELTA: TYPE OF MISHAP: INADVERTENT FIRING  
ECHO: INADVERTENT FIRING OF TWO LIVE 20MM CIWS ROUNDS WHILE  
CONDUCTING MAINTENANCE (PSOT 14 - FIRING CIRCUIT TEST) ON CLOSE  
IN WEAPON SYSTEM(CIWS) MT-22 (PORT). FIRING CIRCUIT TEST WAS  
CONDUCTED IAW QUARTERLY SCHEDULE BY QUALIFIED MAINTENANCE  
PERSONNEL. SAFETY OBSERVER WAS ON STATION. FIRE INTERRUPT KEYS  
PROPERLY ISSUED TO TECHNICIANS. MISHAP WAS INDUCED BY S/F  
PERSONNEL FAILING TO PROPERLY DOWNLOAD MOUNT 22 AFTER PREACTION  
AIM CALIBRATION (PAC) FIRING ON 23 MAR 94 AND FAILING TO PROPERLY  
ADHERE TO 7112/R07-M8R MAINTENANCE REQUIREMENT CARD SAFETY NOTE TO  
HAND CYCLE CONVEYOR TO VERIFY NO LIVE AMMUNITION EXISTED IN THE  
MOUNT PRIOR TO CONDUCTING FIRING CIRCUIT TEST. ROUNDS WERE  
FIRED ON A TRAIN OF 031 DEGREES TRUE AT AN ELEVATION OF 23

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DEGREES FOR MAX APOGEE OF 5800 FT AND APPROXIMATE 9000 YD  
DOWNRANGE FALL OF SHOT. PLOT OF DATA REVEALED PROBABLE FALL OF  
SHOT IN UNDEVELOPED MOUNTAINOUS AREA (KOOLAU MOUNTAIN RANGE)  
NORTH OF AIEA, HI. NO SHIPBOARD CASUALTIES. NO CIVILIAN  
PROPERTY DAMAGE OR PERSONNEL CASUALTIES REPORTED. SUBSEQUENT  
AMMUNITION INVENTORY REVEALED ACCURATE ACCOUNTING OF 20MM  
AMMUNITION (2 ROUNDS IN QUESTION HAD BEEN REPORTED EXPENDED VIA  
CAIMS).

FOXTROT:

1. CAUSE OF MISHAP: SUPERVISORY ERROR.
2. SUPERVISOR FAILED TO REMAIN ON STATION AND ENSURE 23 MAR 94

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\* UNCLASSIFIED \*  
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REPRODUCED AT GOVERNMENT EXPENSE

POST PAC FIRE DOWNLOAD OF AMMUNITION FROM MT 22 WAS PROPERLY CONDUCTED.

- A. SUPERVISOR FAILED TO PROPERLY VERIFY THAT ALL LIVE AMMUNITION HAD BEEN REMOVED FROM MT 22 AFTER DOWNLOAD 23 MAR 94.
- B. SUPERVISOR FAILED TO ENSURE PROPER CONDUCT OF M-8R (PSOT 14) TO VERIFY NO LIVE AMMUNITION EXISTED IN MT 22 PRIOR TO COMMENCING THE PMS ACTION.
3. DOWNLOAD OCCURRED NEAR EVENING MEAL. WEATHER WAS OVERCAST AND RAINY. THIS WAS THE FIRST OCCASION THAT THE CIWS TEAM HAD FIRED.

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SABOTS COLORED BLACK VICE INTERNATIONAL ORANGE. (BLACK SABOTS ARE COMMON ON OLDER CIWS AMMUNITION). AMMO UNLOADED 14-16 MAR 94 AT NAVMAG LUALUALEI FOLLOWING PSA. IAW CURRENT GUIDANCE, ONLY DEPLETED URANIUM ROUNDS ARE AUTHORIZED FOR PAC FIRINGS.

4. WHO CAUSED THE MISHAP
  - A. SUPERVISORS
  - B. RANK: GMC-0897, FC1-1121
  - C. SAFETY OBSERVER WAS PRESENT
  - D. QUALIFICATION OR CERTIFICATION HELD: YES
- GOLF: RECOMENDATIONS AND LESSONS LEARNED:
  - A. STRICT ADHERENCE TO PMS SAFETY AND WARNING NOTES CANNOT BE OVER EMPHASIZED.
  - B. PLACING 5 POLISHED ROUNDS AT EACH END OF AMMO TO BE LOADED, BRACKETING LIVE ROUNDS. THIS WILL ASSIST IN VERIFYING COMPLETENESS OF DOWNLOAD. WHEN ALL 10 ROUNDS ARE OUT, ALL LIVE ROUNDS ARE OUT.
  - C. PLACE A POLISHED ROUND IN AMMUNITION FEED SYSTEM TO MARK WHEN ONE COMPLETE CYCLE IS COMPLETE AND VERIFIED FREE OF LIVE ROUNDS.
  - D. REVIEW PERIODICITY OF CHECK (PSOT 14) AND EXAMINE OPTION OF PERFORMING THIS CHECK AT SEA.

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HOTEL:

1. TECHNICAL INVESTIGATION NOT REQUESTED.
2. ITEMS NOT AVAILABLE.
3. PHOTOGRAPHS NOT AVAILABLE.
4. SUPPLEMENTARY MSG WILL NOT BE SUBMITTED.//

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