



DEPARTMENT OF THE ARMY
UNITED STATES ARMY TANK - AUTOMOTIVE AND ARMAMENTS COMMAND
ARMAMENT AND CHEMICAL ACQUISITION AND LOGISTICS ACTIVITY
ROCK ISLAND, ILLINOIS 61299-7630

REPLY TO
ATTENTION OF

AMSTA-AC-SF

31 DEC 1996

U.S. Nuclear Regulatory Commission
Radiation Safety and Safeguards
ATTN: Mr James Cameron
801 Warrenville Road
Lisle, Illinois 60532-4351

Yes-
10 CFR 20.2201(b)
[10 CFR 20.2201(a)(2)]
12-00722-13
03021073

Dear Sir,

This letter provides a report on the status of the loss of 18 Cells used in the M43A1, Chemical Agent Alarm by the U.S. Army and Marine Corps under license 12-00722-13. Each cell contains 250 MicroCuries of Americium 241. The loss of the 18 cells was reported to the NRC on 18 July 1996.

TAB A Provides a summary of the report of Proceedings by Investigating Officer, 12 Aug 1996.

TAB B Provides a summary of the trip report of the TACOM-ACALA health physicist who went to Johnston Island, 13-17 August 1996.

TAB C Provides the memorandum to U.S. Army Chemical Activity, Pacific (USACAP) on Johnston Island requesting the management program for the use of the M43A1 under the Special Repair Activity, including the completed SRA document.

To date we have assisted in the review of documents being prepared to satisfy the management of the M43A1's at Johnston Island, but have not received finished documents.

We have again requested information from USACAP on Johnston Island regarding the management program for M8A1 use and maintenance, TAB D, and will send personnel to Johnston Island in early March to review their program.

The Points of Contract for this action are Mrs Betty Peterson/Mr Jeff Havenner, (309) 782-2962/2965, mail AMSTA-AC-SF@ria-emh2.army.mil.

4 enclosures

for Jeff Havenner
JOHN J. MATTILA
Chief, Safety Office

970204C006 961231
PDR ADDCK 03021073
C PDR

11
1E-72
JAN 06 1997

Summary of Proceedings by Investigating Officer.

SITUATION: On 9 Feb 1996 the Army, USACAP, received 18 Cells from the contractor, SWRI. Both organizations operate on Johnston Island. USACAP stored these Cells. Accountability of the Cells passed from the contractor to the Army by temporary hand receipt, and the Cells were never put on to the property book record. Storage of the Cells was not segregated from other supply items and after the storage area was cleaned, on or about 15 Jun 1996, the Cells were determined to be missing. Storage personnel notified USACAP chain of command personnel on 9 Jul 1996. On 16-17 Jul 1996 a search with a gamma meter, AN/PDR-77, of all possible locations did not locate the Cells. On 18 July 1996 the Nuclear Regulatory Commission was informed of the loss and Major Sloop was appointed to perform an investigation.

It was determined that:

No program was in place on Johnston Island to sufficiently control receipt, handling, storage, or disposal of M8A1s or Cells by USACAP personnel.

Radiation Protection Officer oversight of operations involving radioactive material was minimal/nonexistent.

The USACAP Accountability Program for Cells and M8A1s was ineffective in assuring all items were accounted for.

Storage of radioactive material by USACAP was not secure or segregated from other items of supply.

Recommendations made were:

USACAP build and implement an Ionizing Radiation Program commensurate with the radioactive material in use on Johnston Island by USACAP.

USACAP insure procedures are in place for receipt, use, storage and proper disposal of radioactive material on Johnston Island.

USACAP insure accountability of radioactive material on Johnston Island.

Summary of Trip Report, 13-17 Aug 1996 to Johnston Island

During this trip the traveler, Mrs Betty Peterson, was told of the results to date of the investigation of the loss of the 18 Cells, and reviewed the capability of the contractor, SwRI to perform maintenance of M8Als under their NRC license 53-23258-01.

The traveler was told verbally of the results of the investigation, on the loss of the 18 Cells, as the report was being reviewed by legal personnel at Oahu, Hawaii at the time of the visit.

An additional concern recorded in the trip report was that of coordination between all groups who operation activities on Johnston Island, the Air Force, U.S. Army Chemical Activity, Pacific (USACAP), and contractors Kalama, SwRI, and Raytheon.

The traveler requested the investigation report be sent to ACALA.

The traveler requested that the radiation program for the Island have a complete review, and be documented in a Standing Operating Procedure, or other appropriate document for continuity.

The traveler recommended that civilians become involved with the radiation protection program to provided day-to-day/year-to-year continuity.

The traveler also indicated a follow-on visit to assest the program would likely be necessary.



DEPARTMENT OF THE ARMY
UNITED STATES ARMY TANK - AUTOMOTIVE AND ARMAMENTS COMMAND
ARMAMENT AND CHEMICAL ACQUISITION AND LOGISTICS ACTIVITY
ROCK ISLAND, ILLINOIS 61299-7630

REPLY TO
ATTENTION OF

AMSTA-AC

02 OCT 1996


MEMORANDUM FOR Commander, U.S. Army Chemical Activity
Pacific, ATTN : APCA-CO, APO AP 96558-0008

SUBJECT: Special Repair Activity (SRA) Authorization Request
AM-014-96

1. We have reviewed the subject SRA authorization request for Johnston Island, AM-014-96, (NSN 6665-01-105-5623).
2. The SRA for Johnston Island has been in operation since the start-up of the chemical demilitarization plant, but was set up at the Department of Army Level. This SRA has provided information on the work at Johnston Island to the commodity manager. This SRA is approved.
3. We request that the Standing Operating Procedure or other document which spells out the management of the assets under this SRA be provided to:

Director, Tank-Automotive Armament Command--
Armament and Chemical Acquisition and
Logistics Activity (TACOM-ACALA)
ATTN: AMSTA-AC-SF
Rock Island, IL 61299-7630

4. The POC is Mrs Betty Peterson, AMSTA-AC-SF, DSN 793-2962, e-mail bpeterso@ria-emh2.army.mil, FAX (309) 782-6758.


JIMMY C. MORGAN
Director, Armament and Chemical
Acquisition and Logistics Activity

AMSTA-AC

SUBJECT: Special Repair Activity (SRA) Authorization
Request, AM-014-96

CF (w/encls)

Commander, U.S. Army, Pacific, ATTN: APSL, Ft Shafter, HI
96858-5100

Commander, USAMC Logistics Support Activity, ATTN: AMXLS-
RRS (Ms Vanderson), Huntsville, AL 35898-7466

Headquarters, Industrial Operations Command, ATTN: AMSIO-
IOW-P, Rock Island, IL 61299-6000

Request for SRA Authority

(Prepared by submitting activity)

1. UIC & DODAAC of requesting activity of unit: WX3JHJ
2. NSN of item: 6665-01-105-5623, consists of M43A1 6665-01-081-8140 and M42 6665-00-859-2215
3. AMDF source of supply code: (B14, B16, etc.) B14
4. Nomenclature: Chemical Agent Alarm, Automatic
5. End Item Application (End item code): SAM
6. AMDF maintenance repair code (D or L): D
7. Repair of NSN: Total or Partial (circle one). If partial, which depot level tasks are proposed to be performed by the SRA?

PARTIAL. Local maintenance will be limited to replacement of defective electronics, aspirator pump and detector modules and work on the upper level of the chassis IAW Depot Maintenance Work Requirement (DMWR) 6665-312 and ACALA Safety Of Use Message ACALA 95-04 (attached). Defective detector modules will be returned to Army for repair or disposal. This work is performed under Nuclear Regulatory Commission License EML 53-23258-01, held by Raytheon Engineers and Constructors, Inc. by personnel contracted to this company.

8. Skills, tools, TMDE, facilities, and publications on hand at the requesting unit (if needed, add a continuation sheet):

a. Skills (including certifications for MIL-STD-2000 soldering):

- (1) Associate Degree in Electronics or Equivalent.
- (2) Company Sponsored Radiation Safety Training Class

b. Tools/Equipment (state if required or on hand): On hand

- (1) M140 Test Set
- (2) Various Electronic test equipment, hand tools

c. TMDE/TPS (state if required or on hand):

- (1) TMDE is required for the M140 test set

d. Facility (state if required cr on hand):

ON HAND. Instrumentation and electronics shop. Air conditioned, with area set aside just to work MSAs.

e. Publications:

- (1) TM 3-6665-312-12
- (2) TM 3-6665-312-30&P
- (3) DMWR 6665-312

9. Yearly number of items to be repaired: 35-40

10. Time limit of SRA (3 years max, AV normally 1 year): 3 years

11. Cost benefit analysis:

The basis for the SRA at Johnston Island is the remote location. It is 717 miles from Hawaii, and many miles further from Anniston Army Depot the only other location where depot repair is performed. In order to keep this equipment running around the clock, there must be a repair capability on the island, and a spare parts inventory maintained.

a. Buy costs: AMDF price less turnin credit: _____

b. Local repair costs:

(1) Direct labor hours _____ X rate _____ = _____

(2) Indirect labor hours _____ X rate _____ = _____

(3) Average parts cost (total per repair) _____

(4) Overhead costs (hours X rate) _____

Total _____

c. Unit Savings: a - b = _____

d. One-time start-up costs which are non-recurring, including facilitization. (Amortize against items 9 and 11c above):

12. NOTE: Costs for this SRA work are not available except as stated in encl.

Encl 1

COST FIGURES

Dave,

I know this isn't much, but here is that workload data IOU. It isn't much, but it is what we reported for workload data (all I have in my files). I can't find anything on CY94.

Workload data for M8A1 Alarm, NSN 6665-01-105-5623:

DATE	QTY REPAIRED	TOTAL REPAIR COST
02 Nov 92	018	\$1,271.
28 Dec 93	085	\$15,538.
03 Mar 95	199	\$21,968.

Don W

Mr. Don Wheeler, HQ U. S. Army Pacific
ATTN: APLG-MMM, Fort Shafter, HI 96858-5100

DSN: (315) 438-8623, Coml (808) 438-8623

DSN FAX: (315) 438-8623

Coml FAX: (808) 438-8623

E-Mail: wheelerd@shafter-emh3.army.mil

Home Page: http://ourworld.compuserve.com:80/homepages/DAC_In_Hawaii

AMSIO-IOW (750-1a)

20 SEP 1996

MEMORANDUM FOR AMSTA-AC-MCMRL/D. Helstrom

SUBJECT: Specialized Repair Activity (SRA) Request AM-014-96

1. The National Stock Numbers for the 2 components of the Automatic Chemical Agent Alarm have a Maintenance Repair Code of "F"; repair is authorized at the direct support level. Therefore, request the subject SRA be withdrawn.
2. The POC is Mr. John Moore, AMSIO-IOW-P, extension 2-1971, fax 2-7191, email jmoore1.

FOR THE COMMANDER:



KENNETH D. SHERMAN
Chief, Weapons Maintenance
and Manufacturing Division

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages 1

To	DENNIS HELSTROM	From	JOHN MOORE
Dept./Agency		Phone #	
Fax #	2693	Fax #	

NSN 7540-01-317-7388

5099-101

GENERAL SERVICES ADMINISTRATION



DEPARTMENT OF THE ARMY
UNITED STATES ARMY TANK - AUTOMOTIVE AND ARMAMENTS COMMAND
ARMAMENT AND CHEMICAL ACQUISITION AND LOGISTICS ACTIVITY
LOCK ISLAND, ILLINOIS 61299-7630

REPLY TO
ATTENTION OF

31 DEC 1996

AMSTA-AC-SF

MEMORANDUM FOR HQ, U.S. Army Chemical Activity, Pacific, ATTN: APCA-CO,
Johnston Island, APO AP 96558-0008

SUBJECT: Management of M8A1's while on Johnston Island

1. Reference:

a. Memo, AMSTA-AC, 2 Oct 1996, subject: Special Repair Activity (SRA) Authorization Request, AM-014-96. (encl 1)

b. Memo, APCA-ELD, 14 Dec 1996 (received 24 Dec 1996), subject: Standing Operating Procedures for M8 Alarm Maintenance.

2. Reference document, 1a, acknowledges and allows a special repair activity for M8A1 Chemical Agent Alarms on Johnston Island.

3. During FY96 there was a loss of 18 cells each containing 250 MicroCuries of Americium 241 (4.5 millicuries total activity) on Johnston Island. The 18 cells have not been recovered to date and management practices to prevent another loss of cells or M8A1s have yet to be documented fully. Reference document, 1b, does not adequately provide information on the management program to be implemented at Johnston Island for the M8A1s.

4. Request that as a minimum the following information be provided to this office by 31 Jan 1996:

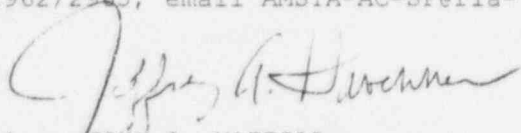
a. Name of Radiation Protection Officer; Training this person has received; and a copy of Appointing Orders.

b. A copy of a Memorandum of Agreement or other formal document showing how Cell Modules and M8A1s are to be moved and tracked between USACAP personnel and contractor personnel on and off island. This document must include responsibilities for accountability operations and compliance with RATTs, receipt of material on island, shipment of material off island, etc IAW AR 710-3.

c. A copy of the Standing Operating Procedure for Wipe Testing and Repair of M8A1s on Johnston Island.

5. The POC for this action is Mrs Betty Peterson/Mr Jeff Havenner, AMSTA-AC-SF, DSN 793-2962/2965, (309)782-2962/2965, email AMSTA-AC-SF@ria-emh2.army.mil.

1 encl


JOHN A. MATTILA
Chief, Safety Office



DEPARTMENT OF THE ARMY
UNITED STATES ARMY TANK - AUTOMOTIVE AND ARMAMENTS COMMAND
ARMAMENT AND CHEMICAL ACQUISITION AND LOGISTICS ACTIVITY
ROCK ISLAND, ILLINOIS 61299-7630

REPLY TO
ATTENTION OF

AMSTA-AC

02 OCT 1996

MEMORANDUM FOR Commander, U.S. Army Chemical Activity
Pacific, ATTN : APCA-CO, APO AP 96558-0008

SUBJECT: Special Repair Activity (SRA) Authorization Request
AM-014-96

1. We have reviewed the subject SRA authorization request for Johnston Island, AM-014-96, (NSN 6665-01-105-5623).
2. The SRA for Johnston Island has been in operation since the start-up of the chemical demilitarization plant, but was set up at the Department of Army Level. This SRA has provided information on the work at Johnston Island to the commodity manager. This SRA is approved.
3. We request that the Standing Operating Procedure or other document which spells out the management of the assets under this SRA be provided to:

Director, Tank-Automotive Armament Command--
Armament and Chemical Acquisition and
Logistics Activity (TACOM-ACALA)
ATTN: AMSTA-AC-SF
Rock Island, IL 61299-7630

4. The POC is Mrs Betty Peterson, AMSTA-AC-SF, DSN 793-2962, e-mail bpeterso@ria-emh2.army.mil, FAX (309) 782-6758.

JIMMY C. MORGAN
Director, Armament and Chemical
Acquisition and Logistics Activity

AMSTA-AC

SUBJECT: Special Repair Activity (SRA) Authorization
Request, AM-014-96

CF (w/encls)

Commander, U.S. Army, Pacific, ATTN: APSL, Ft Shafter, HI
96858-5100

Commander, USAMC Logistics Support Activity, ATTN: AMXLS-
RRS (Ms Vanderson), Huntsville, AL 35898-7466

Headquarters, Industrial Operations Command, ATTN: AMSIO-
IOW-P, Rock Island, IL 61299-6000