

APPENDIX A
INDUSTRIAL/ACADEMIC/RESEARCH INSPECTION FIELD NOTES

Region 1

Inspection Report No. 98-001

License No. SUB-831

Licensee (Name & Address):

Docket No. 40-07344

LOCKHEED MARTIN CORPORATION
P.O. BOX 8555
PHILADELPHIA, PENNSYLVANIA
19101

Licensee Contact J. L. ANDREWS

Telephone No. (610) 354-1918

Amendments Issued Since Last Inspection: (Numbers) 21; 22; 23
Dates of Above Amendments: 12-30-96; 8-5-97; 9-28-97

Priority: 3E
Program Code 11300

Date of Last Inspection 10-26-97
Date of This Inspection FEBRUARY 9 1998
FEBRUARY 19, 1998

Type of Inspection: Announced Unannounced
 Routine Special
 Initial Reinspection

Next Inspection Date 3/2001 Normal Reduced Extended

Justification for change in normal inspection frequency:

Summary of Findings and Action:

- No violations cited. Clear NRC Form 591 or regional letter issued
- Violation(s). NRC Form 591 issued
- Violation(s). regional letter issued
- Followup on previous violations

Inspector: Richard H. Gidum
(Signature)

Date February 18, 1998

Approved: Steve H. [Signature]
(Signature)

Date 3-9-98

D-178

Field notes are to be used by the inspector to assist with the performance of the inspection. Note that all areas indicated in the field notes are not required to be addressed during each inspection. However, for those areas not covered during the inspection, a notation ("Not Reviewed") should be made in each section where applicable. Additionally, all areas covered during the inspection should be documented in sufficient detail to describe what activities and/or records the inspector observed. For example, the types of records that were reviewed and the time periods covered by those records should be noted. If the licensee demonstrates any practices at your request, describe those demonstrations. The observations and demonstrations you describe in this report, along with measurements and some records review, should substantiate your inspection findings.

NOTE: For inspections of radioactive drug distributors, ensure that all applicable sections (regarding 10 CFR Part 32) of the radiopharmacy field notes are completed.

1. INSPECTION, LICENSING, AND INCIDENT HISTORY

A. Violations were identified during any of the last two inspections or two years, whichever is longer. (N/A = Initial insp.) () N/A () Y (✓) N

B. Response letter(s) or 591(s) dated N/A

C. Violations from previous inspection(s):

<u>REQUIREMENT CITED</u>	<u>STATUS</u>
<u>N/A</u>	

D. Any repeat violation(s) identified? () Y () N ✓ N/A
If "Yes," explain:

E. License amendments issued since last inspection, or program changes noted in the license:

<u>AMENDMENT #</u>	<u>DATE</u>	<u>SUBJECT</u>
21	12-30-96	NAME CHANGE
22	8-5-97	ADDITIONAL LOCATION
23	9-28-97	DELETION OF LOCATION

F. During this inspection, was the licensee's implementation of all of the above amendments or program changes inspected/observed? N/A () Y () N

G. During this inspection, were any violations identified involving any of the above amendments or program changes? N/A () Y () N

H. List any incidents or events reported to NRC since the last inspection (Note: "None" indicates that regional event logs, event files, and the licensing file have no evidence of any incidents or events since the last inspection): None

INCIDENT OR EVENT

I. During this inspection, were the incidents/events reviewed with the licensee, and was the licensee's follow-up to the incidents/events examined? N/A () Y () N

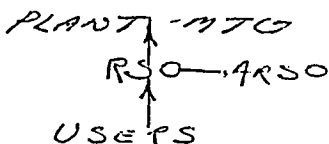
- J. Describe the licensee's follow-up in response to the events/incidents listed in I.H.: ^{NIA}

Comments:

2. ORGANIZATION AND SCOPE OF PROGRAM

- A. Describe the licensee's organizational structure to indicate the "chain-of-command" from senior management to authorized users of licensed material. Show or describe where the RSO and Chairperson of the RSC are located in the licensee's organization and to whom they report:

as described in the License Application; no change since the last inspection 10-26-94



3. Identify licensee personnel contacted during the inspection (including those individuals contacted by telephone).

- # J. L. ANDREWS - PSO
- # T. J. WILLIAMS - TECH (APSO)
- W. TINDALL - TECHNICIAN
- G. SHINN - TECHNICIAN

(Use the following identification symbols:)

- # Individuals present at entrance meeting
- * Individuals present at exit meeting
- + Individuals contacted by telephone

BUILDING 100, 230 MALL BLV.
KING OF PRUSSIA, PA.

- C. Authorized for multiple locations of use (✓) Y () N
If yes, may use ATTACHMENT A as a guide
for inspecting laboratories. 100 CAMPUS DRIVE
NEWTOWN, PA.
- D. Authorized for multiple permanent field office locations () Y (✓) N
(1) Inspection performed at multiple field offices () Y () N MA
(2) If "Yes," list office locations inspected:

- E. Authorized for temporary job site locations (✓) Y (✓) N
(1) Inspection performed at temporary job site(s) () Y (✓) N MA
(2) If not, describe why not:

They haven't done any work at Temp.
Job-sites since last inspection

F. Briefly describe scope of activities, including types and quantities of use involving licensed material, frequency of use, staff size, etc.

2% THORIUM & URANIUM - RESEARCH & DEVELOPMENT
& MANUFACTURING RELATED TO SPACE PROGRAM
≤ 200 KILOGRAMS

21 AUTHORIZED USERS - NO MACHINING DONE AT THIS TIME

MAG. THORIUM 210 SPACE CRAFT FRAME - NO NEW MATERIAL
RECEIVED SINCE LAST INSPECTION - ONLY SURFACE TREATMENT
OF FRAMS - 1/2 - 1 lb AT KING OF PRUSSIA, NEWTOWN

3. MANAGEMENT OVERSIGHT

- A. Radiation Safety Committee (RSC) required [L/C]¹ ^{NII} () Y () N
- (1) RSC fulfills license requirements [L/C] () Y () N
- (2) Records maintained [L/C] () Y () N
- B. Radiation Safety Officer (RSO)
- (1) Authorized on license [L/C] (✓) Y () N
- (2) Fulfills duties as RSO (✓) Y () N
- C. Audits, Reviews, or Inspections
- (1) Audits are required [L/C] (✓) Y () N
- (2) Audits or inspections are conducted (✓) Y () N
- Audits conducted by Q.A. DEPT.
- Frequency YEARLY
- (3) Content and implementation of the radiation protection program reviewed annually by the licensee [20.1101(c)]² (✓) Y () N
- (4) Records maintained [20.2102] (✓) Y () N
- D. Use by authorized individuals [L/C] (✓) Y () N
- E. If supervision permitted by the license or by regs. authorized users supervise adequately [L/C] (✓) Y () N

Here and throughout the field notes, "L/C" means "license condition."

Here and throughout the field notes, sections of 10 CFR are referenced only by their section numbers.

4. FACILITIES

- A. Facilities as described in license application [L/C] (✓) Y () N
- B. Facilities are secured to prevent unauthorized access [L/C] (✓) Y () N
- C. Describe any self-contained dry-source-storage irradiators and/or survey instrument calibrators (model, radionuclide, activity, use, etc.) (✓) N/A

- (1) Maintenance of safety-related components performed by authorized persons [L/C] () Y () N
- (2) Access to keys and/or material controlled [20.1801-1802, L/C] () Y () N
- (3) Access to high/very high radiation areas controlled [20.1601-1602, L/C] () Y () N
- (4) Adequate protection of shield integrity, fire protection [L/C] () Y () N

Basis for Findings:

*VERY GOOD SECURITY; OBSERVATIONS BY THE INSPECTOR
INSPECTORS TOURED OPERATIONS IN ROOMS 8502 & 8613
FACILITIES & EQUIPMENT AS DESCRIBED IN LICENSE APPLICATION*

5. EQUIPMENT AND INSTRUMENTATION

A. Instruments and equipment:

- (1) Appropriate operable survey instrumentation possessed and readily accessible [L/C] (✓) Y () N
- (2) Calibrated as required [20.1501, L/C] (✓) Y () N
- (3) Calibration records maintained [20 2103(a)] (✓) Y () N

- B. Procedures established to identify and report safety component defects [21.21] () Y () N N/A

Basis for Findings: *PMC ANNUAL CALIBRATION OF COUNTERS
SEMI-ANNUAL SURVEY INST. CAL*

6. MATERIALS RECEIPT, USE, TRANSFER, AND CONTROL

- A. Isotope, chemical form, quantity, and use, as authorized [L/C] (✓) Y () N
- B. Licensed materials secured to prevent unauthorized removal or access [20.1801-1802] (✓) Y () N
 - (1) Licensed material in storage in controlled or unrestricted areas is secured from unauthorized removal or access [20.1801] (✓) Y () N
 - (2) Licensed material in controlled or unrestricted areas and not in storage is controlled and under constant surveillance [20.1802] (✓) Y () N
 - (3) Access to restricted areas is limited [20.1003] (✓) Y () N
- C. Describe how packages are received and by whom: (✓) N/A

- D. Written package opening procedures established and followed [20.1906(e)] () Y () N
- E. All incoming packages with DOT labels wiped, unless exempted (gases and special form) [20.1906(b)(1)] () Y () N
- F. Incoming packages surveyed [20.1906(b)(2)] () Y () N
- G. Monitoring in (E) and (F) above, performed within time specified [20.1906(c)] () Y () N
- H. Transfer(s) between licensees performed [30.41] () Y () N
- I. All sources surveyed before shipment and transfer [20.1501(a), L/C] () Y () N
- J. Records of surveys and receipt/transfer maintained [20.2103(a), 30.51] () Y () N
- K. Transfers among licensee's authorized users or locations performed as required [L/C] () N/A () Y () N
- L. Arrangements made for packages containing quantities of radioactive material in excess of Type A quantity [20.1906(a)] () N/A () Y () N
- M. Package receipt/distribution activities evaluated for compliance with 20.1301 [20.1302] () N/A () Y () N

N/A
↓

Basis for Findings:

OBSERVATIONS BY INSPECTOR & DISCUSSIONS w
R50

7. TRAINING, RETRAINING, AND INSTRUCTIONS TO WORKERS

- A. Instructions to workers/students [10 CFR 19.12] Y () N
 B. Training program required [L/C] Y () N

(1) If so, briefly describe training program:

ANNUAL RETRAINING 1-2 HOURS 2/5/95, 7/14/97
 ADMINISTERED BY TSO. SEE ATTACHED
 TRAINING ATTENDANCE LOG COPY.
 ALL EXPERIENCED WORKERS WHO HAD PREVIOUS
 TRAINING UNDER DIRECTIOS SUPERVISOR

- (2) Training program implemented Y () N
 (3) Periodic training program required Y () N
 (4) Periodic training program implemented Y () N
 (5) Records maintained Y () N

C. Individual's understanding of procedures and regulations is adequate Y () N

- (1) Current operating procedures Y () N
 (2) Emergency procedures Y () N
 (3) Use of survey instrumentation Y () N

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D. Revised Part 20
 Workers cognizant of requirements for:

- (1) Radiation safety program [20.1101] Y () N
 (2) Annual dose limits [20.1301-1302] Y () N
 (3) New NRC Forms 4 and 5 N/A () Y () N
 (4) 10% monitoring threshold [20.1502] () Y () N
 (5) Dose limits to embryo/fetus and declared pregnant worker [20.1208] () Y () N N/A
 (6) Grave danger posting [20.1902] N/A () Y () N
 (7) Procedures for opening packages [20.1906] N/A () Y () N
 (8) Sewer disposal limits [20.2003] N/A () Y () N

Basis for Findings:

RECORD REVIEWED BY INSPECTORS & DISCUSSIONS
 W TSO

8. AREA RADIATION SURVEYS AND CONTAMINATION CONTROL

A. Briefly describe area survey requirements [20.1501(a), L/C]:

1/4 SURVEY OF WORK ACTIVITY AREAS
 USE, STORAGE AREAS - BY TSO
 DAILY OR WEEKLY OF LOW & MEDIUM RISK AREAS
 WHERE WORK IS IN PROGRESS

- B. Performed as required [20.1501(a). L/C] Y () N
- (1) Contamination found () Y N
- (2) Corrective action taken and documented () Y N
- C. Records maintained [20.2103. L/C] Y () N
- D. Handling and use of radioactive materials [L/C]
- (1) Protective clothing worn Y () N
- (2) Personnel routinely monitor or frisk themselves after procedures or before leaving Y () N
- (3) No eating/drinking/smoking in use/storage areas Y () N
- (4) No food, drink, or personal effects stored in use/storage areas Y () N
- (5) Proper dosimetry worn Y () N
- (6) Radioactive waste disposed in proper containers Y () N
- (7) No pipetting by mouth () Y () N N/A
- (8) Use of shielding/distance while using/storing material Y () N

Basis for Findings:

*OBSERVATIONS BY THE INSPECTOR. REVIEW OF RECORDS FOR SURVEY OF RAD. STORAGE VAULT 9-1-93; 4-5-94; 8-12-94
SURVEY OF "NORTH CHANNEL" IN PROCESS: 10-1-97; 9-16-97; 8-7-97; 12-30-97
11-7-98*

E. Protection of members of the public

- (1) Licensee made adequate surveys to demonstrate either: (1) that the TEDE to the individual likely to receive the highest dose does not exceed 100 mrem in a year; or (2) that if an individual were continuously present in an unrestricted area, the external dose would not exceed 2 mrem in any hour and 50 mrem in a year [20.1301(a)(1), 1302(b)]; and (3) the air emissions to the atmosphere are within the constraint level [20.1101] Y () N
- (2) Unrestricted area radiation levels do not exceed 2 mrem in any one hour [20.1301(a)(2)] Y () N
- (3) Records maintained [20.2103, 20.2107] Y () N

F. Leak tests and Inventories [L/C]

- (1) Performed as required () N/A Y () N
- (2) Adequate analysis methodology and sensitivity *L.T. NOT NECESSARY* () N/A Y () N
- (3) Records maintained [L/C] Y () N

Basis for Findings: *LAST INVENTORY 1/21/98; REFLECTS WASTE IN STORAGE*

9. RADIATION PROTECTION

- A. Licensee performed exposure evaluation [20.1501] Y () N
- B. Licensee incorporated ALARA considerations in the radiation protection program [20.1101(b)] Y () N
- C. External Dosimetry () N/A
- (1) Licensee monitors workers [20.1502(a). L/C] Y () N
- (2) External exposures account for contributions from airborne activity [20.1203] N/A () Y () N
- (3) Processor LANDAUER Frequency Yr
- (4) Processor is NVLAP-approved [20.1501(c)] Y () N
- (5) Dosimeters exchanged at required frequency [L/C] Y () N
- D. Internal Dosimetry () N/A
- (1) Licensee monitors workers [20.1502(b). L/C] () Y N
- (2) Briefly describe licensee's program for monitoring and controlling internal exposures [20.1701-1702. L/C]:
- (3) Air sampling performed Y () N
- (4) Monitoring/controlling program implemented Y () N
- (5) Respiratory protection equipment [20.1703. L/C] Y () N
- E. Reports () N/A
- (1) Reviewed by RSO Frequency Yr
- (2) Inspector reviewed personnel monitoring records for period 1996 to 1997
- (3) Prior dose determined for individuals likely to receive doses [20.2104] () Y N
- (4) Maximum exposures TEDE "m" Yr Other _____
- (5) Maximum CDEs _____ Organs _____
- (6) Maximum CEDE _____
- (7) Licensee sums internal and external [20.1202] Y () N
- (8) TEDEs and TODEs within limits [20.1201] Y () N

(9) NRC Forms or equivalent [20.2101(d), 2106(c)]

(a) NRC Form 4 () Y () N Complete: () Y () N
(b) NRC Form 5 () Y () N Complete: () Y () N

(10) Worker declared her pregnancy in writing during inspection period (review records) () N/A () Y () N

If "yes," licensee in compliance with dose to embryo/fetus [20.1208] () Y () N
and records maintained [20.2106(e)] () Y () N

F. Who performed PSEs at this facility (number of people involved and doses received)? [20.1206, 20.2104-2105, 20.2204] () N/A

G. Records of exposures, surveys, monitoring, and evaluations maintained [20.2102-2103, 20.2106, L/C] () Y () N

H. Licensee advises each worker annually of worker's dose [19.13(b)] () Y () N

Basis for Findings:

*REVIEW OF RECORDS BY INSPECTOR & DISCUSSIONS
W P SO*

10. RADIOACTIVE WASTE MANAGEMENT () N/A

A. Disposal () N/A

(1) Decay-in-storage () N/A

(a) Procedures approved [20.2001(a)(2), L/C] () Y () N
(b) In accordance with [L/C] () Y () N
(c) Labels removed or defaced [20.1904(b)] () Y () N

(2) Special procedures performed as required [L/C] () Y () N

(3) Liquid scintillation (LS) media and animal carcasses [20.2005] () N/A () Y () N

(4) Improper/unauthorized disposals [20.2001] () Y () N

(5) Records maintained [20.2103(a), 20.2108, L/C] () Y () N

B. Effluents

() N/A

- (1) Release into sanitary sewer [20.2003] (N/A () Y () N
 - (a) Material is readily soluble or readily dispersible [20.2003(a)(1)] () Y () N
 - (b) Monthly average release concentrations do not exceed Appendix B values [20.2003] () Y () N
 - (c) No. more than 5 Ci of H-3, 1 Ci of C-14, and 1 Ci of all other radionuclides combined released in a year [20.2003] () Y () N
 - (d) Procedures to ensure representative sampling and analysis properly implemented [20.1501(a)(2), L/C] () Y () N
- (2) Release to septic tanks [20.2003] (N/A () Y () N
 - (a) Within unrestricted limits [App B, Table 2] () Y () N
- (3) Waste incinerated (N/A () Y () N
 - (a) License authorizes [20.2004(a)(3)] () Y () N
 - (b) Licensee directly monitors exhaust () Y () N
 - (c) Airborne releases evaluated and controlled [20.1501, 20.1701] () Y () N
- (4) Control of effluents and ashes [20.1201, 20.1301, 20.1501, 20.2001, L/C] (N/A

{See also IP 87102, RG 8.37}

 - (a) Air effluent less than 10 mrem constraint limit [20.1101] () Y () N
 - (b) If no. licensee reported appropriate information to NRC () Y () N
 - 1. Corrective actions implemented and on schedule () Y () N

(c) Description of effluent monitoring program

- (i) Monitoring-system hardware equipment adequate () Y () N
- (ii) Equipment calibrated as appropriate () Y () N
- (iii) Air samples/sampling technique (charcoal, HEPA, etc.) analyzed with appropriate equipment (✓) Y () N

Basis for Findings:

DISCUSSIONS W RSD & RECORD REVIEWS BY INSPECTOR

- C. Waste Management () N/A
 - (1) Waste compacted [L/C] () Y (✓) N
 - (2) Storage area(s) () N/A
 - (a) Protection from elements and fire [L/C] (✓) Y () N
 - (b) Control of waste maintained [20.1801] (✓) Y () N
 - (c) Containers properly labeled and area properly posted [20.1902, 20.1904] (✓) Y () N
 - (d) Package integrity maintained [L/C] (✓) Y () N

- (3) Packaging, Control and Tracking
 [Part 20, App. F.III.] [20.2006(d)]: N/A
 Note: The licensee's waste is likely to be Class A.
- (a) Not packaged for disposal in cardboard or fiberboard boxes [61.56(a)] () Y () N
 - (b) Liquid wastes solidified, (i.e., less than 1% freestanding liquid) and void spaces minimized [61.56(a), (b)] () Y () N
 - (c) Does not generate harmful vapors [61.56] () Y () N
 - (d) Structurally stable (will maintain its physical dimensions and form under expected disposal conditions) [61.56(b)] () Y () N
 - (e) Packages properly labeled [App. F.III.A.2] () Y () N
 - (f) Licensee conducts a QC program to ensure compliance with [61.55-56] and includes management evaluation of audits [App. F.III.A.3] () Y () N
 - (g) Shipments not acknowledged within 20 days after transfer are investigated and reported [App. F.III.A.8] () N/A () Y () N
- (4) Transfers to land disposal facilities () N/A
- (a) Transferred to person specifically licensed to receive waste [30.41, 20.2001(b)] () Y () N
 - (b) Each shipment accompanied by a manifest prepared as specified in Section I of Appendix F [20.2006(b), App. F.III.A.4] () Y () N
 - (c) Manifests certified as specified in Section II of Appendix F [20.2006(c)] () Y () N
- D. Records of surveys and material accountability are maintained [20.2103, 2108] () Y () N

Basis for Findings.

NO WASTE SHIPPED SINCE LAST INSPECTION

11. RECORDKEEPING FOR DECOMMISSIONING 2/1

- A. Records of information important to the safe and effective decommissioning of the facility maintained in an independent and identifiable location until license termination. () Y () N
- B. Records include all required information [30.35(g)] () Y () N
 - (1) List of restricted areas [30.35(g)(3)] indicates that laboratories or other rooms have been released since the last inspection () Y () N
 - (2) Confirmatory measurements show that each room is within release limits, and licensee records adequately document the basis for releasing each room () Y () N
- C. Copies of the licensee's decommissioning cost estimates and funding methods on file () Y () N
- D. If the licensee uses a parent company guarantee or a self-guarantee as funding method, does the file contain a copy of the financial test performed for the licensee's most recently completed fiscal year? () N/A () Y () N
- E. If "Yes" to D., do the financial test ratios meet the criteria in 10 CFR Part 30, Appendix A, Section II for parent company guarantees and Appendix C, Section II for self guarantees? () Y () N
- F. Date that licensee's financial assurance instrument was submitted to NRC, if applicable: _____ () N/A
- G. Date that licensee's decommissioning plan was submitted to NRC, if applicable: _____ () N/A
- H. Have radiological conditions at the licensee's facility changed since the financial assurance mechanism and/or decommissioning plan was submitted due to:
 - (1) Incidents or events? () N/A () Y () N
 - (2) Unplanned process upsets or changes? () N/A () Y () N
 - (3) Unauthorized material, form, or possession limit changes? () N/A () Y () N
 - (4) Any other changes? () N/A () Y () N

If "Yes" to any of the above (1)-(4), notify regional management.

Basis for Findings (include comments and measurements on any areas the licensee released for unrestricted use):

12. COMPLIANCE WITH DECOMMISSIONING TIMELINESS RULE

- A. License to conduct a *principle activity* has expired or been revoked () Y () N
- B. Licensee has made a decision to permanently cease *principal activities*, at the entire site, or any separate buildings, or any outdoor areas, including inactive burial grounds () Y () N
- C. A 24-month duration has passed in which no *principal activities*, have been conducted under the license at the site, or at any separate buildings, or any outdoor areas, including inactive burial grounds () Y () N
- D. If "Yes" to either A or B or C:
(1) Identify Site/Bldg/Area: _____
(2) Date of occurrence of A, B, or C: _____

NOTE: If "No" to A and B and C, decommissioning timeliness rule does not apply
If "Yes" to either A or B or C, then complete Attachment B, "Decommissioning Timeliness Field Notes." for this licensee.

Basis for Findings:

OBSERVATIONS BY INSPECTOR & DISCUSSIONS W
RSO

13. TRANSPORTATION (10 CFR 71.5(a) and 49 CFR 170-189) () N/A

A. Licensee Transports: [complete sections (1) - (4), as applicable]

- (1) Limited Quantities, and/or Instruments and Manufactured Articles: (Radioactive Material, excepted package, [additional info], 7. UN 2910) () N/A
- (a) Package meets general design requirements [173.410] () Y () N
- (b) Radiation level \leq 0.005 mSv/hr (0.5 mrem/hr) (Exclusive use instruments and articles, 2 mrem/hr) () Y () N
- (c) Contamination less than 173.443 limits, QC examination/test performed prior to each shipment [173.475(I)] () Y () N
- (d) Limited Quantity Package marked "Radioactive" [173.421(a)(4)] () Y () N
- (e) 173.422 certification statement attached/enclosed ("This package conforms to the conditions and limitations specified in...") () Y () N

- (2) Type A Quantities (Radioactive Material, nos. 7. UN 2982) () N/A
- (a) Packaging:
- (i) Packaging is proper for contents (i.e., DOT 7A), is unimpaired, and is prepared correctly [173.475(a)-(f)] () Y () N
 - (ii) All packages meet general design requirements [173.410] () Y () N
 - (iii) DOT 7A Package meets additional Type A design requirements [173.412, 178.350] () Y () N
- (b) Recordkeeping:
- (i) Special Form source records [173.475(a)] () Y () N
 - (ii) DOT 7A performance/design documentation [173.415(a)] () Y () N
- (c) Hazards communications requirements (consult the "NRC field reference charts" that correspond to elements (i) through (v), below):
- (i) Shipping Papers [172.200-205] () Y () N
 - (ii) Marking Packages [172.300-338] () Y () N
 - (iii) Labeling Packages [172.400-450] () Y () N
 - (iv) Placarding Vehicles [172.500-560] () Y () N
 - (v) Emergency Response information and guidance [172.600-604] () Y () N
- (d) Radiation level/Contamination limits [173.441, 173.443]
- (i) Package levels within limits () Y () N
 - (ii) QC examination/test performed prior to each shipment [173.475(I)] () Y () N
- (3) Type B Quantities (Radioactive Material, nos. 7. UN 2982) () N/A
- (a) Packaging is proper for contents (i.e., Type B), is unimpaired, and is prepared correctly [173.475(a)-(f)] () Y () N
 - (b) Inspector must complete Section 2 of NRC Inspection Procedure (IP) 86740
 - (c) Sections 2.c. and 2.d., shown in the previous section for Type A Quantities, also apply. Complete those sections.

14. GENERIC COMMUNICATION OF INFORMATION

- A. Bulletins, information notices, NMSS Newsletters, etc., received by the licensee (Y () N
- B. Licensee took appropriate action in response to bulletins, generic letters, etc. (Y () N

Basis for Findings:

DISCUSSIONS W TSO

15. NOTIFICATION AND REPORTS

- A. Licensee in compliance with 19.13, 30.50 (reports to individuals, public and occupational, monitored to show compliance with Part 20) (N/A () Y () N
- B. Licensee in compliance with 20.2201, 30.50 (theft or loss) (None () Y () N
- C. Licensee in compliance with 20.2202, 30.50 (incidents) (None () Y () N
- D. Licensee in compliance with 20.2203, 30.50 (overexposures and high radiation levels) (None () Y () N
- E. Licensee aware of NRC Ops Center phone number [(301)-816-5100] () Y () N
- F. Licensee in compliance with [20.2203] (constraint on air emissions) (None () Y () N

Basis for Findings:

DISCUSSIONS W TSO & RECORD REVIEWS

16. SPECIAL LICENSE CONDITIONS OR ISSUES

(N/A

- A. Special license conditions or issues to be reviewed:

*AMENDMENT
DISCUSSED W. J. KINNEHAN USED FOR CORRECTED COPY TO LICENSEE. TO INCLUDE THE DOWNS; LAST AMENDMENT NOT INCLUDED*

- B. Evaluation:

LICENSEE ALSO WOULD SUBMIT TO NRC AN AMENDMENT REQUEST TO MODIFY LICENSE & RADIATION PROTECTION PROGRAMS TO MORE ACCURATELY REPRESENT CURRENT PROGRAMS TO NRC

17. OBSERVATIONS/DEMONSTRATIONS OF LICENSED ACTIVITIES

Briefly describe the activities and procedures observed and/or demonstrated during the inspection. For example, if you observed licensee personnel working in radiation areas using licensed material or performing functions associated with radiation safety such as receiving or transporting licensed material; conducting or receiving training; disposing of radioactive waste; conducting surveys; or making measurements, then describe what you saw. If the licensee demonstrated any practices at your request, describe those demonstrations. The observations and demonstrations you describe here, and elsewhere in the "Basis for Findings" sections of this report, along with measurements and some records review, should substantiate your inspection findings.

Describe what activities or procedures were observed and/or demonstrated by the licensee during the inspection:

OBSERVED TECHNICIANS PERFORM SURFACE TREATMENT
NORTH PANEL

LMC M&S Valley Forge Operation Radioactive Material Inventory Rp't H

<u>EH&S No.</u>	<u>LMC LIC No.</u>	<u>Status</u>	<u>ISOTOPE</u> <u>Orig. Activity Date</u>	<u>Device</u>	<u>Device Model No.</u> <u>Device Serial No.</u>	<u>Form</u> <u>Container</u>	<u>Owner</u>	<u>Loc Used</u> <u>Loc Stored</u>
RadHS041	General	STORAGE	H3	5 EXIT SIGNS		Case	LMC M&S	None L1310
RadHS053	General	STORAGE	H-3	Static Meter	3M Co. #	Bag	LMC M&S	None L1310
RadHS054	GENERAL	STORAGE	H-3	4 EXIT SIGNS	2040 D61175	Box	LMC-VFO	None L1310
RadHS058	GENERAL	STORAGE	U-238 ~ 1 microCi	None		Powder plastic bottle	LMC M&S	None L1310
RadHS065	General	STORAGE	Po-210 0.01 Ci.	Fire sensor		?	LMC M&S	was Model Shop L1310
RadHS078	General	STORAGE	Po-210	Fire Sensor		Case	LMC	NONE L1310
RadHS079	General	STORAGE	PO-210	2 Static Master	1550 DUPL. HS	Box	LMC	NONE L1310
RadHS035	PA-202	CANCELED	Ra-226	Alphatron		Gas Tank		
RadHS038	PA-202	CANCELED	Cd-109	Calibration				
RadHS049	PA-202	CANCELED	Ra-226	Alphatron				
RadHS050	PA-202	CANCELED	Ra-226	Alphatron Gauge				
RadHS051	PA-202	CANCELED	Ra-226	Alphatron Gauge				
RadHS033	SMB-1005	CANCELED	U-238	DU-Shield				
RadHS042	SUB- 831	CANCELED	U-238 1.1 mCi.			OXIDE PAIL	MMC AS	
RADHS055	SUB -831	CANCELED	Th-232 38 micro Ci.	Chemical	No Model No Serial #	Thorium nitrate Bottle		
RadHS081	SUB-831	ACTIVE	Th-232 less than 1 millicCi	North Panel	DSCS III B6	MgTh Box	USAF	CPC Test Room Test Room
RadHS082	SUB-831	ACTIVE	Th-232 less than 1 millicCi	North Panel	DSCS III B8	MgTh Box	USAF	M8613 M8613

JLA 1/21/98

1/29/98
M. M. H. C. O.

LMC M&S Valley Forge Operation Radioactive Material Inventory Rp't H

<u>EH&S No.</u>	<u>LMC LIC No.</u>	<u>Status</u>	<u>ISOTOPE</u> <u>Orig. Activity Date</u>	<u>Device</u>	<u>Device Model No.</u> <u>Device Serial No.</u>	<u>Form</u> <u>Container</u>	<u>Owner</u>	<u>Loc Used</u> <u>Loc Stored</u>
RadHS083	SUB-831	ACTIVE	Th-232 less than 1 millicCi	North Panel	DSCS III B11	MgTh Box	USAF	M8613
RadHS085	SUB-831	ACTIVE	TH232 1997	MACHININGS	n/a	METAL BAGS	USAF	L1310
RadHS008	SUB-831	CANCELED	U-238 53 micro Ci			U in urethane resin 2 JARS		
RadHS026	SUB-831	CANCELED	Th-232 6.03 millicCi	11 plates		MgTh METAL	USAF	@ SV
RadHS028	SUB-831	CANCELED	Th-232; 6 micro Ci.			METAL BAGS	was Joe D'Andrea	
RadHS039	SUB-831	CANCELED	Th-232 0.75 microCi.			MgTh BAG	MMC AS	
RadHS043	SUB-831	CANCELED	U-238 8.3 mCi.			OXIDE PAIL	MMC AS	
RadHS044	SUB-831	CANCELED	U-238 approx. 0.04 Ci	Simulator		METAL W87	US DOE	
RadHS045	SUB-831	CANCELED	U-238	SRV Prgm		METAL W78	US DOE	
RadHS056	SUB-831	CANCELED	U 1 microCi ?	In W-62 sim.		oxide ? W78	US DOE	
RadHS059	SUB-831	CANCELED	Th-232 less than 1 millicCi	Spacecraft	DSCS III 3A3	MgTh Box	USAF	@ SV
RadHS060	SUB-831	CANCELED	Th-232 less than 1 millicCi	Spacecraft	DSCS III B6 SP	MgTh Box	USAF	
RadHS061	SUB-831	CANCELED	Th-232 less than 1 millicCi	Spacecraft	DSCS III B7	MgTh Box	USAF	
RadHS062	SUB-831	CANCELED	Th-232 less than 1 millicCi	Spacecraft	DSCS III B8 SP	MgTh Box	USAF	Sys Test SV
RadHS063	SUB-831	CANCELED	Th-232 less than 1 millicCi	Spacecraft	DSCS III B 11 (South	MgTh Box	USAF	
RadHS064	SUB-831	CANCELED	Th-232 less than 1 millicCi	Spacecraft	DSCS III B13	MgTh Box	USAF	
RADHS076	SUB-831	CANCELED	TH-232 ~1983	6 MgTh Plates	HK31-H2	Metal None	USAF	SV

Lockheed Martin Missiles & Space

Valley Forge, PA

COURSE # _____ COURSE TITLE Ionizing Radiation/MgTh-232 Safety

Date: 2/5/98

Trainer(s): John L. Andrews

Training Attendance Log:

Print Name	Signature	Employee # (Contractors use SS#)	Phone Number (Contractor Name & LMMS Dept.)
Employee: John Doe	<i>John Doe</i>	E0432	x1234
Contractor: John Doe	<i>John Doe</i>	123-45-6789	Graebel Moving - Facilities
1. Jeff Evans	<i>Jeff Evans</i>	E2073	x 1312
2. Russ Wade	<i>Russ Wade</i>	94312	(215)-497-1185
3. KENNETH L. VAUGHN	<i>Kenneth Vaughn</i>	93729	215 497 -2117
4. GEORGE PIGAGE	<i>George Pigage</i>	05215	215-497-2486
5. EDUARDO RODRIGUEZ	<i>Eduardo Rodriguez</i>	77928	x " -2348
6. David Simerco	<i>David Simerco</i>	E2515	" -232/1196
7. JAMES TAPHORN	<i>James Taphorn</i>	90714	2348
8. HENRY HEINE	<i>Henry Heine</i>	09331	4930
9. Steve N. Persio	<i>Steve N. Persio</i>	E0065	x 2121
10. Dave VanHise	<i>Dave VanHise</i>	93543	215 497 - 1309
11. GREG ABBEY	<i>Greg Abbey</i>	E2150	1506
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Filed at
1997
Misc.

1997

Safety Training

MgTh

7/14

J. Rensman

K. Fenimore

G. Shertan

W. Tindall

R. Peszek

J. Salas

E. Rodriguez

7/16

G. Kline

G. Shinn

not R. Newell

not on
class roster
I. Smith