



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415



March 1, 2001

Docket No. 03012894
Control No. 129022

License No. 37-02006-09

Steven J. Walker
Vice President
Lockheed Martin Corporation
Communications and Power Center
100 Campus Drive
Newtown, PA 18940

SUBJECT: LOCKHEED MARTIN CORPORATION, ISSUANCE OF LICENSE
AMENDMENT, CONTROL NO. 129022

Dear Mr. Walker:

This refers to your license amendment request. Enclosed with this letter is the amended license.

Please review the enclosed document carefully and be sure that you understand and fully implement all the conditions incorporated into the amended license. If there are any errors or questions, please notify the U.S. Nuclear Regulatory Commission, Region I Office, Licensing Assistance Team, (610) 337-5239, so that we can provide appropriate corrections and answers.

Thank you for your cooperation.

Sincerely,

Original signed by Eric H. Reber

Eric H. Reber
Health Physicist
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety

Enclosure:
Amendment No. 14

cc:
Sydney W. Porter, C.H.P., Radiation Safety Officer

F/4

S. Walker
Lockheed Martin Corporation

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MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee 1. Lockheed Martin Corporation Communications and Power Center 2. 100 Campus Drive Newtown, Pennsylvania 18940	In accordance with letter dated December 19, 2000, 3. License number 37-02006-09 is amended in its entirety to read as follows: 4. Expiration date May 31, 2003 5. Docket No. 030-12894 Reference No.	
6. Byproduct, source, and/or special nuclear material A. Cobalt 60 B. Thorium C. Any byproduct material with atomic numbers 3 through 83 inclusive	7. Chemical and/or physical form A. Sealed sources (AECL Model C-166, C-167, or C-198) B. Magnesium-thorium alloy (not to exceed 2% thorium by weight) C. Neutron irradiated electronic products	8. Maximum amount that licensee may possess at any one time under this license (b)(2)High A. _____ curies per source and _____ curies total B. 5 kilograms C. Not to exceed 200 microcuries per component and 100 millicuries total
9. Authorized use: A. For use in AECL Model Gammacell 220 Irradiator for irradiation of materials except explosives and flammable materials. B. Research and development as defined in 10 CFR 30.4 and manufacturing related to missile and space programs. C. Research and development as defined in 10 CFR 30.4.		

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CONDITIONS

10. Licensed material listed in Item 6.A. shall be used only at 230 Mall Boulevard, King of Prussia, Pennsylvania. Licensed material listed in Item 6.B. shall be used at the licensee's facilities at 100 Campus Drive, Newtown, Pennsylvania and at temporary job sites of the licensee anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material. Licensed material listed in Item 6.C. shall be used only at the licensee's facilities located at Valley Forge Space Center, 230 Mall Boulevard, King of Prussia, Pennsylvania and at temporary job sites of the licensee anywhere in the United States where the U. S. Nuclear Regulatory Commission maintains jurisdictions for regulating the sue of licensed material.
11. A. Licensed material listed in Item 6.A. and 6.B. shall be used by individuals designated by the Radiation Safety Committee, Roman Herschitz, Chairman. Licensed material listed in Item 6.C. shall be by or under the supervision of Stephen K. Moyer.
- B. The Radiation Safety Officer for this license is Sydney Porter.
12. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders or detector cells by the licensee.
13. The licensee shall not acquire licensed material in a sealed source or device unless the source or device has been registered with the U.S. Nuclear Regulatory Commission pursuant to 10 CFR 32.210 or equivalent regulations of an Agreement State.
14. The licensee shall conduct a physical inventory every six months, or at other interval approved by NRC, to account for all sealed sources and/or devices received and possessed under the license.
15. A. Sealed sources and detector cells shall be tested for leakage and/or contamination at intervals not to exceed 6 months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed 3 years.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed 3 months.
- C. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen 3; or

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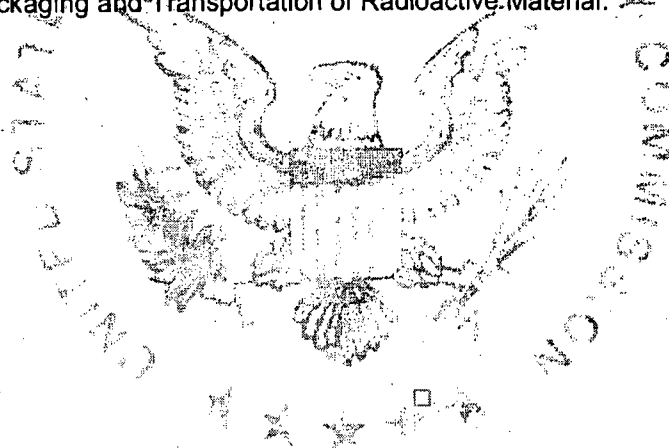
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- (ii) they contain only a gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer to another person, and have not been tested within the required leak test interval, they shall be tested before use or transfer. No sealed source or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. Records of leak test results shall be kept in units of microcuries and shall be maintained for inspection by the Commission. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source shall be removed from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within 5 days of the date the leak test result is known with the U.S. Nuclear Regulatory Commission, Region I, ATTN: Chief, Nuclear Materials Safety Branch, 475 Allendale Road, King of Prussia, Pennsylvania 19406. The report shall specify the source involved, the test results, and corrective action taken.
- G. The licensee is authorized to collect leak test samples for analysis by the licensee. Alternatively, tests for leakage and/or contamination may be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
16. The licensee shall not perform repairs or alterations of the irradiator involving removal of shielding or access to the licensed material. Removal, replacement, and disposal of sealed sources in the irradiator shall be performed by a person specifically licensed by the Commission or an Agreement State to perform such services.
17. Licensed material shall not be used in or on human beings.
18. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license.
19. The licensee is authorized to hold radioactive material with a physical half-life of less than or equal to 120 days for decay-in-storage before disposal in ordinary trash, provided:
- A. Waste to be disposed of in this manner shall be held for decay a minimum of ten half-lives.

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- B. Before disposal as ordinary trash, the waste shall be surveyed at the container surface with the appropriate survey instrument set on its most sensitive scale and with no interposed shielding to determine that its radioactivity cannot be distinguished from background. All radiation labels shall be removed or obliterated.
- C. A record of each such disposal permitted under this License Condition shall be retained for three years. The record must include the date of disposal, the date on which the byproduct material was placed in storage, the radionuclides disposed, the survey instrument used, the background dose rate, the dose rate measured at the surface of each waste container, and the name of the individual who performed the disposal.
20. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."



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21. Except as specifically provided otherwise in this license, the licensee 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 licensee's application and correspondence are more restrictive than the regulations.

- A. Letter dated June 28, 1990
- B. Application dated October 14, 1992
- C. Letter dated December 15, 1992
- D. Application dated February 25, 1993
- E. Letter dated March 31, 1993
- F. August 1995 Revision of application dated September 29, 1994 with attachments
- G. Letter dated March 20, 1996 with attachments
- H. Letter dated March 13, 1998
- I. Letter dated July 17, 1998
- J. Letter dated July 21, 1999
- K. Letter dated August 26, 1999
- L. Letter dated February 19, 2001

For the U.S. Nuclear Regulatory Commission

Date March 1, 2001

By

Original signed by Eric H. Reber

Eric H. Reber
Nuclear Materials Safety Branch 2
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406