

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, 37, 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.

<p style="text-align: center;">Licensee</p> <p>1. General Dynamics Land Systems</p> <p>2. 38500 Mound Road Sterling Heights, MI 48310-3269</p>	<p>In accordance with application dated August 26, 2015,</p> <p>3. License number 21-21068-01 is renewed in its entirety to read as follows:</p> <hr/> <p>4. Expiration date January 31, 2026</p> <hr/> <p>5. Docket No. 030-19731 Reference No.</p>
--	--

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Hydrogen-3	A. Gas in glass ampules as sealed sources (Self-Powered Lighting Limited or MB-Microcrotec, Inc.)	A. No single source to exceed 10.2 curies per assembly. Total not to exceed 8,000 curies
B. Nickel-63	B. Nickel-63 metal electroplated on a brass cylinder	B. No single source to exceed 15 mCi per source. Total not to exceed 30 curies
C. Americium-241	C. Sealed source (Amersham Corporation Foil Source Model AMM)	C. No single source to exceed 250 microcuries. Total not to exceed 30 millicuries
D. Krypton-85	D. Krypton-85 gas Source Stick (MIL. SPEC.No. MIL-R-51305 [MU])	D. No single source to exceed 5 millicuries. Total not to exceed 15 millicuries.

9. Authorized Use:
- A. To be used in light source cell assembly Model P/N 12304725, to be installed or removed component of M1A1 infinity collimator used as a muzzle reference sensor on military equipment (Abrams Tank Weapon System) for redistribution to the Department of Defense or contractors of the Department of Defense possessing a specific license issued by the U. S. Nuclear Regulatory Commission or an Agreement State.
 - B. and C. For possession incident to installation, receipt, removal, storage, use and transfer of CAM (nickel-63), M88 ACADA/GID-3 (nickel-63) and M43A1 (americium-241) chemical agent detectors. Detectors may be directly redistributed as individual units or as part of integrated systems to the Department of Defense or contractors of the Department of Defense possessing a specific license issued by the Nuclear Regulatory Commission or an Agreement State.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**

License Number
21-21068-01

Docket or Reference Number
030-19731

Amendment No. 26

- D. For possession and use incident to the testing of the AN/VDR2 Radiac meter to verify proper system integration of the Control Data Processing Unit (CDPU) for use on the FOX Nuclear Biological Chemical Reconnaissance System (NBCRS).

CONDITIONS

10. A. Licensed material may be used at the licensee's facilities located at:

General Dynamics
Land Systems
Shelby Operations
14920 23 Mile Road
Shelby Township, MI 48315-3008

General Dynamics
Land Systems
Joint Systems Manufacturing Center
1161 Buckeye
Lima, OH 45804-1825

General Dynamics
Land Systems
Central Office
38500 Mound Road
Sterling Heights, MI 48310-3200

General Dynamics
Land Systems
Joint Base Lewis-McChord
Bldg R3754 South 17th St.
Joint Base Lewis-McChord, WA 98433-0029

General Dynamics
Land Systems
Logistics & Engineering Facility
6000 E. 17 Mile Road
Sterling Heights, MI 48313-4500

General Dynamics
Anniston Operations
Anniston Army Depot
7 Frankford Avenue
Buildings 134 & 414
Anniston, AL 36206-4199

- B. Licensed materials in devices which have been installed on military equipment may be used for purposes of display, demonstration, promotion, maintenance or operational testing at temporary jobsites anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction. Authorized areas of use within Agreement States shall only be areas under exclusive federal jurisdiction.

11. A. Licensed material shall be used by, or under the supervision of Boyd H. Rose.

B. The Radiation Safety Officer for the activities authorized by this license is Boyd. H. Rose.

12. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
13. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, manufacturer's name and model numbers, location of the sealed sources and the date of the inventory.

**MATERIALS LICENSE
SUPPLEMENTARY SHEET**License Number
21-21068-01Docket or Reference Number
030-19731

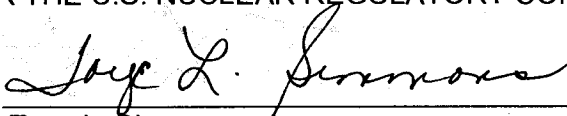
Amendment No. 26

14. The licensee may transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material".
15. A. Sealed sources shall be tested for leakage and/or contamination at intervals not to exceed the intervals specified in the certificate of registration issued by NRC under 10 CFR 32.210 or by an Agreement State.
- B. In the absence of a certificate from a transferor indicating that a leak test has been made within the intervals specified in the certificate of registration issued by NRC under 10 CFR 32.210 or by an Agreement State prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- C. Sealed sources need not be tested if they are in storage and are not being used. However, when they are removed from storage for use or transferred 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 shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.
- D. The leak test shall be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie (185 becquerels) or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 30.50(c)(2), and the source shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations.
- E. Tests for leakage and/or contamination shall be performed by persons specifically licensed by the Commission or an Agreement State to perform such services. In addition, the licensee is authorized to collect leak test samples but not perform the analysis; analysis of leak samples must be performed by persons specifically licensed by the Commission or an Agreement State to perform such services.
- F. Records of leak tests results shall be kept in units of microcuries and shall be maintained for 3 years.
16. 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. Application dated August 26, 2015 (ML15243A193)
B. Letter dated December 18, 2015 (ML15356A477)

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date DEC 29 2015

By


Toy L. Simmons
Materials Licensing Branch
Region III