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RADIOLOGIC HEALTH BRANCH

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State of California-Health and Welfare Agency

Department of Health Services

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**RADIOACTIVE MATERIAL LICENSE**

*Pursuant to the California Code of Regulations, Division 1, Title 17, Chapter 5, Subchapter 4, Group 2, Licensing of Radioactive Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, use, possess, transfer, or dispose of radioactive material listed below; and to use such radioactive material for the purpose(s) and at the places(s) designated below. This license is subject to all applicable rules, regulations, and orders of the Department of Health Services now or hereafter in effect and to any standard or specific condition specified in this license.*

1. Licensee	Boeing North American/Rocketdyne Division P.O. Box 7922, MS-T100	3. License Number	0015-19	Amendment Number:	103
2. Address	6633 Canoga Avenue Canoga Park, CA 91309-7922	4. Expiration date	September 11, 2002	(1)	
Attention:	James G. Barnes Radiation Safety Officer	5. Inspection agency	Radiologic Health Branch Los Angeles		

License Number 0015-19 is hereby amended as follows:

6. Nuclide	7. Form	8. Possession Limit
A. Hydrogen-3	A. Any	A. Not to exceed 100 curies.
B. Any radionuclide with atomic number 3-83.	B. Any	B. Not to exceed 25 curies for any one radionuclide. Total not to exceed 100 curies.
C. Any radionuclide with atomic number 3-83.	C. Sealed sources in metal capsules sealed by welding or brazing.	C. Not to exceed 75 curies for any one radionuclide. Total not to exceed 250 curies.
D. Any radionuclide with atomic number 84 and above except: special nuclear material and source material.	D. Any	D. Not to exceed 100 millicuries for any one radionuclide. Total not to exceed 1 curie.
E. Any radionuclide with atomic number 84 and above except: special nuclear material and source material.	E. Sealed sources in metal capsules sealed by welding or brazing.	E. Not to exceed 5 curies for any one radionuclide. Total not to exceed 25 curies.
F. Source material	F. Any	F. Not to exceed 1000 pounds.
G. Any radionuclide	G. Any as radioactive contamination.	G. See Condition 16 for decontamination levels.
H. Special nuclear material	H. Sealed sources	H. Not to exceed 1 millicurie per source. Total not to exceed 1 curie.
I. Cobalt-60	I. Sealed source (Technical Operations, Inc. Model A424-14)	I. 1 source not to exceed 50 curies.
J. Iridium-192	J. Sealed sources (Technical Operations, Inc. Model 866)	J. 4 sources not to exceed 100 curies each.

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9. Authorized Use

- A.-F. To be used for calibration of instruments, and research and development as defined in Title 10, California and H. Code of Regulations, Section 30100.
- G. To be used incidental to customer decontamination services. (see Condition 16)
- I. To be used in a Technical Operations, Inc. projector Model 680 for industrial radiography and in a Technical Operations, Inc. source changer Model 488 for source exchange. (Storage only)
- J. To be used in a Technical Operations, Inc. projector Model 520 for industrial radiography and in a Technical Operations, Inc. source changer Model 650 for source exchange. (Storage only)

LICENSE CONDITIONS

- 10. Radioactive material shall be used only at the following locations:
  - (a) 8900 DeSoto Avenue, Canoga Park, California. (DeSoto Facility)
  - (b) 6633 Canoga Avenue, Canoga Park, California. (Canoga Facility)
  - (c) Santa Susana Field Laboratories, Top of Woolsey Canyon Road, Simi Hills, California. ("SSFL")
- 11. This license is subject to an annual fee for sources of radioactive material authorized to be possessed at any one time as specified in Items 6, 7, 8 and 9 of this license. The annual fee for this license is required by and computed in accordance with Title 17, California Code of Regulations, Sections 30230-30232 and is also subject to an annual cost-of-living adjustment pursuant to Section 100425 of the California Health and Safety Code.
- 12. Radioactive material may be used only by, or under the supervision of, individuals designated by the Radiation Safety Committee.
- 13. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in Items 6, 7, 8 and 9 of this license in accordance with the statements, representations, and procedures contained in the documents listed below. The Department's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
  - (a) The renewal application with attachments dated August 4, 1993 signed by P. D. Rutherford as modified by the letters with attachments dated August 10, 1995, November 27, 1995 and January 15, 1996 all signed by James Gary Barnes.
  - (b) The letter with attachments dated June 5, 1996, signed by James Gary Barnes, CHP, relative to procedures and documentation for release of construction debris for disposal.
  - (c) The letter dated October 30, 1996, signed by James Gary Barnes, regarding change in ownership and corporate name change.
  - (d) The letter dated October 26, 1996, signed by James Gary Barnes regarding procedures to analyze leak test wipes.

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- (e) The letter dated June 28, 1996, signed by Majelle Lee, with attachments; as modified by the letter dated August 21, 1996, signed by Phil Rutherford, with attached Specification of sitewide Release Limits.
  - (f) The letter dated May 6, 1996 signed by B. M. Oliver with attachments thereto relative to release of Former Sodium Disposal Facility for unrestricted use.
  - (g) The letters dated March 26, 1997 and January 7, 1998, signed by P. D. Rutherford with attached information relative to release of Building 363 at the Santa Susana Field Laboratory.
  - (h) The letter dated February 6, 1998, signed by James G. Barnes regarding instrument calibration procedures.
  - (i) The letter dated June 15, 1998, signed by James G. Barnes, CHP, regarding instrument calibration procedures.
  - (j) The letter dated August 3, 1998, signed by Gary Barnes regarding disposal of Building 11 debris and the letter with attachments dated November 4, 1998, signed by Phil Rutherford relative to release of Building 11 in Area IV, Santa Susana Field Laboratories (SSFL) for unrestricted use.
  - (k) The letters dated February 17, 1998 and August 19, 1998 with attachments thereto, both signed by Phil Rutherford, regarding the release of Building 009 for unrestricted use.
  - (l) The letter dated September 3, 1998 with attachments thereto, signed by Phil Rutherford, regarding the release of Building 020 (Hot Lab) from the license.
  - (m) The letter with attachments dated November 9, 1998, signed by Phil Rutherford, regarding the release of the Gamma Irradiation Facility (GIF) located in Building 104 at the DeSoto Facility. For unrestricted use.**
  - (n) The letter with attachments dated December 16, 1998, signed by Phil Rutherford, regarding the release for unrestricted use of the Mass Spectroscopy Laboratory, located in Building 104 at the DeSoto Facility.**
14. (a) The Radiation Safety Officer in this program shall be James G. Barnes.  
(b) The Chairperson of the Radiation Safety Committee shall be P. D. Rutherford.  
(c) The Alternate Radiation Safety Officer in this program shall be P. D. Rutherford.
15. All uses of radioactive material under this license shall be conducted in accordance with the user's application to and modifying requirements of the Radiation Safety Committee. The review of intramural applications shall include findings with respect to matters specified in Title 17, California Code of Regulations, Section 30194. Documentation of these findings shall be maintained for Department inspection.
16. The licensee is authorized to provide radioactive decontamination as a customer service pursuant to subitem G of this license provided that:
- (a) The total quantity of radioactive material handled at any one customer's site and the level of radioactive contamination does not exceed the limits specified in the table below:

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Radionuclide	Total Activity	Contamination Levels ( $\mu\text{Ci}/100\text{cm}^2$ )	
		Alpha	Beta/Gamma
Any source material and beta/gamma emitter, except Sr-90 and Pb-210	10 mCi	10E-1	10E-1
Sr-90 and Pb-210 and any alpha emitter, except source and special nuclear material	1 mCi	10E-2	10E-2
Any special nuclear material	0.1 grams	10E-2	10E-2

- (b) A report is rendered to the customer with a copy to the Department within 30 days of the initiation of decontamination. This report shall include:
  - (1) A complete description of the facility or object contaminated.
  - (2) A specification of the nature of the radioactive contamination by nuclide or emission and levels initially observed.
  - (3) Final levels observed on completion of decontamination.
  - (4) If decontamination is not complete, a statement of progress to date of report.
- (c) Decontamination shall be under the supervision of a health physicist who is eligible for certification by the American Board of Health Physics and who shall sign the decontamination reports.
- 17. The licensee is authorized to calibrate radiation detection instruments for his own use or for other subsidiaries of the Boeing Company. Each calibration of a radiation detection instrument shall include not less than 2 points other than zero (separated by at least 50 percent of full scale) for each scale of the instrument certified by the licensee.
- 18. Sealed sources possessed under this license shall be tested for leakage and/or contamination as required by Title 17, California Code of Regulations, Section 30275 (c).
- 19. The licensee is authorized to perform tests for leakage and/or contamination of sealed sources. The following tests may be performed for sources possessed under this license and as a customer service:
  - (a) Collection of wipe test samples from sealed sources and devices containing sealed sources.
  - (b) Analysis of materials collected by the licensee as stated in (a) above for the amount of radioactivity.
- 20. The following individuals are authorized to collect wipe test samples of sealed sources possessed under this license using leak test kits acceptable to the California Department of Health Services:
  - (a) The Radiation Safety Officer
  - (b) Qualified individuals designated in writing by the Radiation Safety Officer

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21. Records of leak test results shall be kept in units of microcuries and maintained for inspection. Records may be disposed of following Department inspection. Any leak test revealing the presence of 0.005 microcuries or more of removable radioactive material shall be reported to the Department of Health Services, Radiologic Health Branch, 601 N. 7th Street, P.O. Box 942732 - MS 178, Sacramento, CA 94234-7320, within five days of the test. This report shall include a description of the defective source or device, the results of the test, and the corrective action taken.

For the State Department of Health Services

Date: August 2, 1999

By: David Wesley

Radiologic Health Branch  
P.O. Box 942732-MS 178, Sacramento, CA 94234-7320

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