

BYPRODUCT MATERIAL LICENSE A 24-2261-3, AMENDMENT NO. 1
(D61)

Pursuant to the Atomic Energy Act of 1954 and Title 10, Code of Federal Regulations, Chapter 1, Part 30, Licensing of Byproduct Material, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer and import byproduct material listed below; and to use such byproduct material for the purpose(s) and at the place(s) designated below. This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, and is subject to all applicable rules, regulations, and orders of the Atomic Energy Commission now or hereafter in effect and to any conditions specified below.

<p>Licensee</p> <p>1. Name McDonnell Aircraft Corporation</p> <p>2. Address St. Louis Missouri</p>		<p>3. License number 24-2261-3 is amended in its entirety to read as follows:</p> <p>4. Expiration date April 30, 1961</p> <p>5. Reference No.</p>
<p>6. Byproduct material (element and mass number)</p> <p>(See Page 2)</p>	<p>7. Chemical and/or physical form</p> <p>(See Page 2)</p>	<p>8. Maximum amount of radioactivity which licensee may possess at any one time.</p> <p>(See Page 2)</p>

9. Authorized use

(See Page 2)

CONDITIONS

10. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
11. The licensee shall comply with the provisions of Title 10, Part 20, Code of Federal Regulations, Chapter 1, "Standards for Protection Against Radiation."
12. Byproduct materials shall be used by, or under the direct supervision of, William L. Kertter, G. George Young, James G. Morris, E. A. Lamb, T. C. Link, G. G. Longue, F. C. McCallister, Jr., E. E. Wam or E. E. Weber.
13. Byproduct material as sealed sources shall not be opened.
14. Sealed sources of byproduct material shall not be combined for use in "open air" techniques to produce a radiation level in excess of the level produced by the largest single source authorized by this license for "open air" use.
15. Byproduct material shall not be used in products distributed to the public.

(See Page 2)

For the U. S. Atomic Energy Commission

Original Signed By
James R. Mason

Chief, Licensing Branch
Division of Licensing and Regulation
Washington 25, D. C.

Date **June 24, 1958**

DUPLICATED
FOR DIV. OF WSP.

RCB 6/26/59

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BYPRODUCT MATERIAL LICENSEPage 2 of 3 Pages

Supplementary Sheet

24-2261-3

License Number (D61)

AMENDMENT NO. 1

CONTINUED:

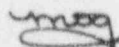
6. Byproduct material (element and mass number)	7. Chemical and/or physical form	8. Maximum amount of radioactivity which licensees may possess at any one time
A. Cesium 137	A. Sealed Sources (Nuclear Con- sultants, Inc.; custom)	A. 100 millicuries - maximum activity in a single source not to exceed 4 microcuries
B. Krypton 85	B. Sealed Sources (W. S. Radium light sources, model LAB-484-1A)	B. 8 sources of 20 milli- curies each 16 sources of 20 milli- curies each Total - 2 curies
C. Any byproduct material having atomic no. from 3 to 83, inclusive	C. Irradiated metal samples	C. 1 curie total
D. Thallium 204	D. Any	D. 20 millicuries
E. Cesium 137	E. Any	E. 20 millicuries
F. Cobalt 60	F. Any	F. 20 millicuries
G. Cobalt 60	G. Sealed Sources	G. 200 millicuries
H. Iridium 192	H. Sealed Sources (Lanthagen Specialties Co.; Type 30)	H. 1 source not to exceed 2 curies each Total - 1/2 curies
I. Cobalt 60	I. Sealed Sources (Nuclear-Chicago Model NB-60)	I. 2 sources not to exceed 1 curie each Total - 2 curies

9. Authorized use

- A. Use in tagging of backing bars and seat ejection safety pins on ejection detection after manufacture.
- B. Use in aircraft in-flight recording equipment.
- C. Machine-tool wear studies.

(See Page 3)

For the U. S. Atomic Energy Commission

Original Signed By
James R. Masonby Chief, Lanthagen Branch
Division of Licensing and Regulation
Washington 25, D. C.Date June 24, 1959

U. S. ATOMIC ENERGY COMMISSION
BYPRODUCT MATERIAL LICENSE

Supplementary Sheet

20-2361-3

License Number (241)

AMENDMENT NO. 1

CONTENTS:**9. Authorized use****B, E, F, and G: Calibration of instruments.****H and I: To be used by "open-air" handling technique for industrial radiography.****CONDITIONS**

16. Sealed sources described in Items 6 and 7, 7H and I, and 8H and I above shall be acquired from the supplier with a durable, legible and visible tag permanently attached. The tag shall be attached directly to the source or attached by a durable chain or leader. The tag shall be at least 1 inch square, shall bear a conventional radiation symbol and a statement of the following instructions: "Danger - Radioactive Material, Do Not Handle, Notify Civil Authorities if Damaged." Repair or replacement of tags shall be accomplished by returning the source to the manufacturer.
17. The licensee shall possess and use byproduct material described in Items 6, 7 and 8 of this license in accordance with statements, representations, and procedures contained in his application dated October 14, 1958, and in related documents and amendments as follows:
- A. Administrative instructions entitled "Safe Practice Procedures" submitted May 21, 1959.
- B. Letter dated May 13, 1959, from W. L. Koster.
18. Written administrative instructions unformulated in Condition 17.A. covering radiological protection, control, and security of byproduct material shall be followed and a copy of these instructions shall be supplied to each individual using or having responsibility for use of such material. Any changes in these administrative instructions shall have the prior approval of the Isotopes Branch, Division of Licensing and Regulation.
19. A calibrated and operable survey instrument is to be maintained at each site where radiographic exposures are being made. A physical radiation survey is to be made (1) to determine compliance with Sections 19.103 and 20.203 of Title 10, Code of Federal Regulations, Part 20, "Standards for Protection Against Radiation" and (2) immediately after each radiographic exposure is completed to determine that the source has been returned to its storage condition. The survey instrument shall have a range of a few millirentgens per hour to at least one (1) roentgen per hour.
20. The radiographic areas are to be kept under continuous surveillance during each exposure operation.

For the U. S. Atomic Energy Commission

Original Signed By
James R. Masonby Chief, Isotopes BranchDivision of Licensing and Regulation
Washington 25, D. C.Date June 24, 1959