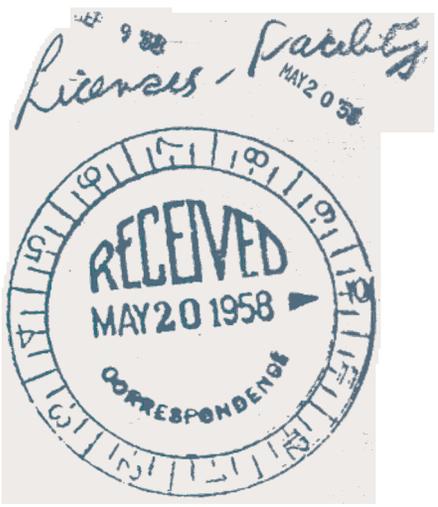


Attachment 2

*ms*



UNITED STATES  
 ATOMIC ENERGY COMMISSION  
 WASHINGTON 25, D. C.

May 17. 1958

Docket 50-94

AT DIST: C. Adams w/encl. T. Humphrey, A. Martin, S. Siegel, C. Starr, J. Henrie, E. Kramer  
 Recd: 5-20-58 AT  
 Dist: 5-20-58 rr/gg

Atomics International  
 A Division of North American  
 Aviation, Inc.  
 P. O. Box 309  
 Canoga Park, California

Attention: Dr. C. Starr  
 Vice President

Gentlemen:

Attached is Facility License No. R-40 authorizing North American Aviation, Inc., to possess and operate at Canoga Park, the research reactor designated as the "L-77" reactor.

Sincerely yours,

H. L. Price  
 Director  
 Division of Licensing and Regulation

Attachment:  
 Facility License No. R-40

AIR MAIL

7 2 5 4 7



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON 25, D. C.

DOCKET NO. 50-94  
NORTH AMERICAN AVIATION, INCORPORATED

L I C E N S E

License No. R-40

1. The Atomic Energy Commission (hereinafter "the Commission") finds that:
  - a. The solution-type 10 watt nuclear research reactor authorized for construction by Construction Permit CPER-26 issued to North American Aviation, Inc., has been constructed in accordance with the specifications contained in the application;
  - b. There is reasonable assurance that the reactor can be operated without endangering the health and safety of the public;
  - c. North American Aviation, Inc., is technically and financially qualified to operate the reactor;
  - d. Issuance of a license to possess and operate the reactor will not be inimical to the common defense and security or to the health and safety of the public;
  - e. North American Aviation, Inc., has submitted proof of financial protection which satisfies the requirements of Commission regulations which are currently in effect.
2. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses North American Aviation, Inc.:
  - a. Pursuant to Section 104c of the Act and Title 10, CFR, Chapter 1, Part 50, "Licensing of Production and Utilization Facilities" to possess and operate as a utilization facility the nuclear research reactor designated below;
  - b. Pursuant to the Act and Title 10, CFR, Chapter 1, Part 70, "Special Nuclear Material", to possess and use 1.5 kilograms of contained uranium-235 as fuel for operation of the reactor;

- c. Pursuant to the Act and Title 10, CFR, Chapter 1, Part 30, "Licensing of Byproduct Material" to possess but not to separate, such byproduct material as may be produced in the operation of the reactor.
3. This license applies to the reactor which is owned by North American Aviation, Inc., and located at Canoga Park, California, and described in North American Aviation, Inc.'s application dated January 17, 1958, and amendments thereto dated March 26, 1958 and April 15, 1958, (all herein "the application"). The reactor is of the solution-type, is moderated by light water and uses as fuel a solution of uranyl sulfate containing uranium enriched to 20% or more in the isotope uranium-235. It is designed to operate at a thermal power level of ten (10) watts and is designated by North American Aviation, Inc., as the "L-77" reactor.
4. This license shall be deemed to contain and be subject to the conditions specified in Section 50.54 of Part 50; is subject to all applicable provisions of the Act and rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

a. Operating Restrictions

- (1) North American Aviation, Inc., shall operate the facility in accordance with the application.
- (2) North American Aviation, Inc., shall not operate the reactor at a power level in excess of 10 watts (thermal).

Materials having a reactivity value in excess of 0.5% may not be inserted into the exposure tubes.

b. Records

In addition to those otherwise required under this license and applicable regulations, North American Aviation, Inc. shall keep the following records:

Reactor operating records, including power levels.

Records showing radioactivity released or discharged into the air or water beyond the effective control of North American Aviation, Inc., as measured at the point of such release or discharge.

Records of emergency scrams, including reasons for emergency shutdowns.

c. Pursuant to the Act and Title 10, CFR, Chapter 1, Part 30, "Licensing of Byproduct Material" to possess but not to separate, such byproduct material as may be produced in the operation of the reactor.

3. This license applies to the reactor which is owned by North American Aviation, Inc., and located at Canoga Park, California, and described in North American Aviation, Inc.'s application dated January 17, 1958, and amendments thereto dated March 26, 1958 and April 15, 1958, (all herein "the application"). The reactor is of the solution-type, is moderated by light water and uses as fuel a solution of uranyl sulfate containing uranium enriched to 20% or more in the isotope uranium-235. It is designed to operate at a thermal power level of ten (10) watts and is designated by North American Aviation, Inc., as the "L-77" reactor.

4. This license shall be deemed to contain and be subject to the conditions specified in Section 50.54 of Part 50; is subject to all applicable provisions of the Act and rules, regulations and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

a. Operating Restrictions

(1) North American Aviation, Inc., shall operate the facility in accordance with the application.

North American Aviation, Inc., shall not operate the reactor at a power level in excess of 10 watts (thermal).

Materials having a reactivity value in excess of 0.5% may not be inserted into the exposure tubes.

b. Records

In addition to those otherwise required under this license and applicable regulations, North American Aviation, Inc. shall keep the following records:

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Records showing radioactivity released or discharged into the air or water beyond the effective control of North American Aviation, Inc., as measured at the point of such release or discharge.

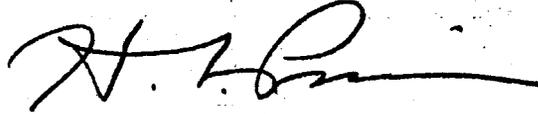
Records of emergency scrams, including reasons for emergency shutdowns.

c. Reports

North American Aviation, Inc., shall immediately report to the Commission any indication or occurrence of a possible unsafe condition relating to the operation of the reactor.

5. This license is effective as of the date of issuance and shall expire at midnight May 16, 1978.

FOR THE ATOMIC ENERGY COMMISSION



H. L. Price  
Director  
Division of Licensing and Regulation

Date of Issuance: May 17, 1958