

UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

LICENSE AUTHORITY FILE COPY

DO NOT REMOVE

AEROTEST OPERATIONS, INC.

DOCKET NO. 50-228

AEROTEST RADIOGRAPHY AND RESEARCH REACTOR (ARRR)

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 1  
License No. R-98

1. The Atomic Energy Commission (the Commission) has found that:
  - A. The application for transfer of license filed by OEA, Inc. for Aerotest Operations, Inc. (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. Construction of the facility has been substantially completed in conformity with Construction Permit No. CPRR-86, and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
  - E. Aerotest Operations, Inc. is technically and financially qualified to possess, use, and operate the facility in accordance with the rules and regulations of the Commission;

DO NOT REMOVE

- F. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public, and does not involve a significant hazards consideration;
  - G. The receipt, possession, and use of byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30 and 70, including Sections 30.33, 70.23, and 70.31;
  - H. The licensee is qualified to be the holder of the license; and
  - I. The transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.
2. Facility Operating License No. R-98, previously issued to Aerojet-General Corporation, is hereby transferred to Aerotest Operations, Inc. and the license is reissued in its entirety to read as follows:
- A. This license applies to the Aerotest Radiography and Research Reactor (ARRR), previously called the Aerojet General Nuclear Industrial Reactor (AGNIR), a pool-type nuclear reactor owned by the OEA, Inc. The facility is located at the Aerotest Operations site near San Ramon, California, and is described in the application dated September 14, 1964 (the application), and in supplements thereto, including the application for transfer of license dated April 24, 1974.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Aerotest Operations, Inc.:
    - (1) Pursuant to Section 104c of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", to possess, use, and operate the reactor at the designated location in San Ramon, California, in accordance with the procedures and limitations set forth in this license;
    - (2) Pursuant to the Act and 10 CFR Part 70, "Special Nuclear Material", to receive, possess, and use up to 5.0 kilograms of contained uranium 235 in connection with operation of the reactor; and
    - (3) Pursuant to the Act and 10 CFR Part 30, "Licensing of Byproduct Material", (1) to receive, possess, and use a 2 curie americium-beryllium neutron startup source, and (2) to possess, but not to separate, such byproduct material as may be produced by operation of the reactor.

C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state power levels not in excess of 250 kilowatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 4, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

Amdt 4

1-28-81

[

(3) Physical Security Plan

The licensee shall maintain in effect and fully implement all provisions of the NRC-approved physical security plan, including amendments and changes made pursuant to the authority of 10 CFR Section 50.54(p). The approved security plan consists of the document withheld from public disclosure pursuant to 10 CFR 2.790(d), entitled "Aerotest Operations, Inc. Security Plan" dated August 10, 1976, submitted by letter dated October 4, 1976, as revised January 16, 1979.

Amend #3  
7/18/79

D. Reports

In addition to reports otherwise required under this license and applicable regulations:

(1) The licensee shall report in writing to the Commission within 10 days of its observed occurrence any incident or condition relating to the operation of the facility which prevented or could have prevented a nuclear system from performing its safety function as described in the Technical Specifications or in the Hazards Summary Report.

(2) The licensee shall report to the Commission in writing within 30 days of its observed occurrence any substantial variance disclosed by operation of the facility from performance specifications contained in the Hazards Summary Report or the Technical Specifications.

(3) The licensee shall report to the Commission in writing within 30 days of its occurrence any significant change in transient or accident analysis, as described in the Hazards Summary Report.

Supersedes  
Amend. 2

E. Records

In addition to those otherwise required under this license and applicable regulations, the licensee shall keep the following:

---

- (1) Reactor operating records, including power levels.
- (2) Records of in-pile irradiations.
- (3) Records showing radioactivity released or discharged into the air or water beyond the effective control of the licensee as measured at the point of such release or discharge.
- (4) Records of emergency reactor scrams, including reasons for emergency shutdowns.

- F. This amended license is effective as of the date of issuance and shall expire at midnight April 16, 2005.

FOR THE ATOMIC ENERGY COMMISSION

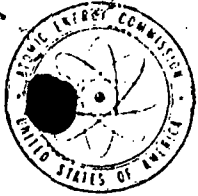
*Karl R. Goller*

Karl R. Goller, Assistant Director  
for Operating Reactors  
Directorate of Licensing

Attachment:  
Change No. 8 to the Technical  
Specifications

Date of Issuance: October 22, 1974

LICENSE AUTHORITY FILE COPY (4)



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

October 22, 1974

Docket No. 50-228

DO NOT REMOVE

*Amend. #1  
Chge #8 } R-98*

Aerotest Operations, Inc.  
ATTN: Mr. R. L. Newacheck  
President  
3255 Fostoria Way  
San Ramon, California 93583

Gentlemen:

The Commission has issued the enclosed Amendment No. 1 to Facility License No. R-98 which includes Change No. 8 to the Technical Specifications. The Amendment transfers the license from the Aerojet-General Corporation to Aerotest Operations, Inc., a wholly-owned subsidiary of Explosive Technology, Inc., itself a wholly-owned subsidiary of OEA, Inc., and redesignates the reactor as the Aerotest Radiography and Research Reactor (ARPR).

A copy of the related Safety Evaluation is also enclosed.

Also enclosed are two copies of Amendment No. 13 to Indemnity Agreement No. B-2 transferring the indemnity coverage for the facility from Aerojet-General to Aerotest Operations, Inc. Please sign and return one copy of the agreement to the Directorate of Licensing.

Sincerely,

Robert A. Purple, Chief  
Operating Reactors Branch #1  
Directorate of Licensing

Enclosures:

1. Amendment No. 1
2. Safety Evaluation
3. Amendment No. 13 to Indemnity Agreement No. B-2 (2 cys)

cc: See next page

October 22, 1974

cc: Aerojet-General Corporation  
Nuclear Division  
Post Office Box 77  
San Ramon, California 94583

OEA, Inc.  
1030 E North Avenue  
DesPlaines, Illinois 60016

Dr. Simon Kinsman, Chief  
Radiological Health Section  
722 Capitol Mall - Room 2077  
Sacramento, California 95814



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

AEROTEST OPERATIONS, INC.

DOCKET NO. 50-228

AEROTEST RADIOGRAPHY AND RESEARCH REACTOR (ARRR)

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 1  
License No. R-98

1. The Atomic Energy Commission (the Commission) has found that:
  - A. The application for transfer of license filed by OEA, Inc. for Aerotest Operations, Inc. (the licensee) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. Construction of the facility has been substantially completed in conformity with Construction Permit No. CPRR-86, and the application, as amended, the provisions of the Act and the rules and regulations of the Commission;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
  - D. There is reasonable assurance: (i) that the activities authorized by this operating license can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the rules and regulations of the Commission;
  - E. Aerotest Operations, Inc. is technically and financially qualified to possess, use, and operate the facility in accordance with the rules and regulations of the Commission;

- F. The issuance of this operating license will not be inimical to the common defense and security or to the health and safety of the public, and does not involve a significant hazards consideration;
  - G. The receipt, possession, and use of byproduct and special nuclear material as authorized by this license will be in accordance with the Commission's regulations in 10 CFR Parts 30 and 70, including Sections 30.33, 70.23, and 70.31;
  - H. The licensee is qualified to be the holder of the license; and
  - I. The transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.
2. Facility Operating License No. R-98, previously issued to Aerojet-General Corporation, is hereby transferred to Aerotest Operations, Inc. and the license is reissued in its entirety to read as follows:
- A. This license applies to the Aerotest Radiography and Research Reactor (ARRR), previously called the Aerojet General Nuclear Industrial Reactor (AGNIR), a pool-type nuclear reactor owned by the OEA, Inc. The facility is located at the Aerotest Operations site near San Ramon, California, and is described in the application dated September 14, 1964 (the application), and in supplements thereto, including the application for transfer of license dated April 24, 1974.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Aerotest Operations, Inc.:
    - (1) Pursuant to Section 104c of the Act and 10 CFR Part 50, "Licensing of Production and Utilization Facilities", to possess, use, and operate the reactor at the designated location in San Ramon, California, in accordance with the procedures and limitations set forth in this license;
    - (2) Pursuant to the Act and 10 CFR Part 70, "Special Nuclear Material", to receive, possess, and use up to 5.0 kilograms of contained uranium 235 in connection with operation of the reactor; and
    - (3) Pursuant to the Act and 10 CFR Part 30, "Licensing of Byproduct Material", (1) to receive, possess, and use a 2 curie americium-beryllium neutron startup source, and (2) to possess, but not to separate, such byproduct material as may be produced by operation of the reactor.



- C. This license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state power levels not in excess of 250 kilowatts (thermal).

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 8.

D. Reports

In addition to reports otherwise required under this license and applicable regulations:

- (1) The licensee shall report in writing to the Commission within 10 days of its observed occurrence any incident or condition relating to the operation of the facility which prevented or could have prevented a nuclear system from performing its safety function as described in the Technical Specifications or in the Hazards Summary Report.
- (2) The licensee shall report to the Commission in writing within 30 days of its observed occurrence any substantial variance disclosed by operation of the facility from performance specifications contained in the Hazards Summary Report or the Technical Specifications.
- (3) The licensee shall report to the Commission in writing within 30 days of its occurrence any significant change in transient or accident analysis, as described in the Hazards Summary Report.

E. Records

In addition to those otherwise required under this license and applicable regulations, the licensee shall keep the following:

- (1) Reactor operating records, including power levels.
- (2) Records of in-pile irradiations.
- (3) Records showing radioactivity released or discharged into the air or water beyond the effective control of the licensee as measured at the point of such release or discharge.
- (4) Records of emergency reactor scrams, including reasons for emergency shutdowns.

F. This amended license is effective as of the date of issuance and shall expire at midnight April 16, 2005.

FOR THE ATOMIC ENERGY COMMISSION



Karl R. Goller, Assistant Director  
for Operating Reactors  
Directorate of Licensing

Attachment:

Change No. 8 to the Technical  
Specifications

Date of Issuance: October 22, 1974

ATTACHMENT TO LICENSE AMENDMENT NO. 1

CHANGE NO. 8 TO APPENDIX A OF TECHNICAL SPECIFICATIONS

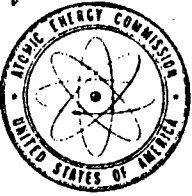
FACILITY OPERATING LICENSE NO. R-98

DOCKET NO. 50-228

Revise Appendix A as follows:

1. Change the name of the reactor to "Aerotest Radiography and Research Reactor (ARRR)".
2. Paragraph 2.1 - end the sentence after the words "exclusion area".
3. Paragraph 2.2 and 2.3 - change the abbreviation "AGNIR" in the first sentence to read "ARRR".
4. Paragraph 12.1.1 - revise the paragraph to read as follows:  

"12.1.1 The Reactor Supervisor shall have responsibility of the reactor facility. In all matters pertaining to reactor operations and to these Technical Specifications, the Reactor Supervisor shall be responsible to the President, Aerotest Operations, Inc., a wholly-owned subsidiary of Explosive Technology, Inc. The President, Aerotest Operations, Inc. shall report to the Board of Directors of Aerotest Operations, Inc. which includes the Presidents of both OEA, Inc. and Explosive Technology, Inc."



UNITED STATES  
ATOMIC ENERGY COMMISSION  
WASHINGTON, D.C. 20545

SAFETY EVALUATION BY THE DIRECTORATE OF LICENSING

SUPPORTING AMENDMENT NO. 1 TO LICENSE NO. R-98

(CHANGE NO. 8 TO THE TECHNICAL SPECIFICATIONS)

AEROTEST OPERATIONS, INC.

DOCKET NO. 50-228

By application dated April 24, 1974, OEA, Inc. requested transfer of title of the Aerojet-General Nuclear Industrial Reactor (AGNIR) from Aerojet-General Corporation to Aerotest Operations, Inc., a wholly-owned subsidiary of OEA, Inc. Aerotest Operations, Inc., will be the new licensee for the reactor facility.

The applicant has stated that there will be no changes to the facility and that the personnel responsible for operating the reactor will continue in their present duties. Thus, the technical qualifications of the new licensee are identical to those found acceptable upon initial issuance of the operating license to Aerojet-General Corporation. No changes will be made in the license for the facility, other than the transfer of title, and the present Technical Specifications for the facility will remain essentially unchanged.

We have reviewed the financial qualifications of Aerotest Operations, Inc., and have concluded that it possesses or can obtain the necessary funds to meet the requirements of 10 CFR Part 50, Section 50.33(f) to operate the Aerotest Reactor Facility, and if necessary to permanently shut down the facility and maintain it in a safe shutdown condition.

We find nothing in the application to suggest that the applicant or the other participating companies are owned, controlled or dominated by an alien, a foreign corporation or a foreign government. We also find that, in view of the nature of the proposed action, a transfer of title, there will be no significant hazards involved.

We have, therefore, determined that Aerotest Operations, Inc., is technically and financially qualified to operate the facility and that there is reasonable assurance that the reactor can be operated in the manner proposed without endangering the health and safety of the public.