



# **AEROTEST OPERATIONS, INC.**

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28 July 2005

Director of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Annual Summary of Changes, Tests, and Experiments at Aerotest Radiography and Research Reactor (ARRR), Docket no. 50-228, for the period of 1 July 2004 to 30 June 2005.

Gentlemen:

The enclosed report summarizes the ARRR operations from July 1, 2004 through June 30, 2005. This submittal complies with the requirements set forth in 10 CFR 50.59, "Authorization of Changes, Tests, and Experiments." Summary forms of monthly operations and unscheduled power reductions are included.

No new or unusual problems have been noted during the year and reactor operations have remained stable with respect to safety and reliability.

Sincerely,

Christopher E. Bauman  
Reactor Supervisor  
Aerotest Operations, Inc.

ANNUAL SUMMARY OF CHANGES, TESTS AND EXPERIMENTS  
PERFORMED AT THE  
AEROTEST RADIOGRAPHY AND RESEARCH REACTOR  
(ARRR)

DOCKET NO. 50-228

BY



CHRISTOPHER E. BAUMAN

APPROVED BY



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FOR

RAY R. TSUKIMURA

PRESIDENT

AEROTEST OPERATIONS, INC.

## **SECTION I**

### **Part I – Changes**

- 1. Updated Procedures and Safety Analysis Report have been submitted to Nuclear Regulatory Commission as part of facility's relicensing application package. No changes have yet been implemented.**

## Part II – Experiments

No new experiments were performed during the year. The experiments performed in this reporting period were as follows:

### Experiment No.

114          Neutron radiography performed in the radiography facilities.

## SECTION II

### ARRR MONTHLY OPERATING SUMMARY

<b>Date</b>	<b>Operating Hours</b>	<b>kilowatt-hours</b>	<b>Accumulated kW-h</b>	<b>Experiments &amp; Irradiations</b>	<b>Unscheduled Shutdowns</b>
7-04	181	27,041	12,485,380	0	2
8-04	204	30,596	12,515,976	0	0
9-04	156	23,275	12,539,251	0	0
10-04	164	24,532	12,563,783	0	3
11-04	185	27,666	12,591,449	0	8
12-04	149	22,304	12,613,753	0	0
1-05	174	26,029	12,639,782	0	1
2-05	130	19,446	12,659,228	0	1
3-05	166	24,852	12,684,080	0	2
4-05	137	20,521	12,704,601	0	2
5-05	130	19,504	12,724,105	0	1
6-05	128	19,192	12,743,297	0	0
<b>Totals</b>	<b>1904</b>	<b>284,958</b>	<b>12,743,297</b>	<b>0</b>	<b>20</b>

## ARRR UNSCHEDULED POWER REDUCTIONS

TYPE OF SCRAM							CHANNEL AFFECTED						Comments
No.	DATE	AUTO	MAN	Spurious	Op. Error	CAL	1	2	3	4	Earthquake	H20	
1	7/9/2004	X					X	X	X	X			Channel 4 90% Voltage
2	7/22/2004	X		X			X	X	X	X			Channel 2 Period Fast
3	10/7/2004	X		X			X	X	X	X			Channel 3 Low
4	10/15/2004	X		X			X	X	X	X			no visible alarm
5	10/19/2004	X		X			X	X	X	X			no visible alarm
6	11/3/2004	X		X			X	X	X	X			no visible alarm
7	11/3/2004	X		X			X	X	X	X			no visible alarm
8	11/3/2004	X		X			X	X	X	X			no visible alarm
9	11/6/2004	X		X			X	X	X	X			no visible alarm
10	11/10/2004	X		X			X	X	X	X			no visible alarm
11	11/11/2004	X		X			X	X	X	X			no visible alarm
12	11/13/2004	X		X			X	X	X	X			no visible alarm
13	11/19/2004	X					X	X	X	X			Channel 3 Low
14	1/5/2005	X			X		X	X	X	X			Channel 3 High
15	2/16/2005	X					X	X	X	X			Channel 4 Low *
16	3/9/2005	X		X			X	X	X	X			no visible alarm
17	3/22/2005	X					X	X	X	X			no visible alarm *
18	4/5/2005	X		X			X	X	X	X			no visible alarm
19	4/18/2005	X					X	X	X	X			no visible alarm *
20	5/26/2005	X					X	X	X	X			Channel 2 Period Fast
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													

\* Physical shock to console