ANNUAL SUMMARY OF CHANGES, TESTS AND EXPERIMENTS

PREFORMED AT THE

AEROTEST RADIOGRAPHY AND RESEARCH REACTOR

(ARRR)

DOCKET No. 50-228

FOR THE PERIOD ENDING JUNE 30, 1992

BY

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APPROVED BY:

H. G. SIMENS PRESIDENT AEROTEST OPERATIONS, INC.

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PART 1 - CHANGES

A. During the year, in September of 1991 we replaced one graphite element with one new stainless steel fuel element. On May fifth and May eleventh two old stainless steel fuel elements were replaced with two new stainless steel fuel elements.

B. In February we modified the demineralizer system and also replaced the demineralizer pump when the pump seal failed.

C. The magnet system for the shim control rod was rewired when the existing wire was shorted.

PART 11 - EXPERIMENTS

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

EXPERIMENT NUMBER

114	Neutron radiography performed in the radiography facilities.					
116	Irradiation of hydrocarbon activation analysis samples					
120	Irradiation of plastic slides impregnated with microscopic quantities of fissionable materials.					
124	Irradiation of solid state electronic components to determine radiation damage effects.					

SECTION II

ARRR MONTHLY OPERATIONS SUMMARY

DATE	OPERATING HOURS	KILOWATT HOURS	ACCUMULATED kw HOURS	EXPERIMENTS & IRRADIATIONS	UNSCHEDULED SHUTDOWNS
7-91	245	61283	8001076	7	3
8-91	225	56357	8057433	7	4
9-91	236	59113	8116546	3	1
10-91	299	74690	8191236	5	0
11-91	250	62590	8253826	1	1
12-91	241	59886	8313712	0	0
1-92	208	52085	8365797	1	4
2-92	218	54550	8420347	1	0
3-92	214	53512	8473859	1	0
4-92	180	45040	8518899	0	1
5-92	175	43611	8562510	0	0
6-92	214	53427	8615937	2	2
TOTALS	2707	676144	8615937	28	16

ARRR UNSCHELGLED POWER REDUCTIONS

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	1	TYPE OF SCRAM				CHANNEL AFFECTED							
∉ Da	Date	ate Auto	Man.	Spur.	Oper. Error	Cal	1	2	3	4	Barth Quake	H_0	Comments
1	7/1/91			X									no indication
2	7/20/91			X				X					spur. fast
3	7/20/91			X				X					spur. fast
4	8/9/91			X				X					upper shutter
5	8/9/91			X				Х					upper shutter
6	8/9/91			X				Х			2		upper shutter
7	8/12/91			Х				Х					upper shutter
8	9/27/91			X		-				Х			90% high volt.
9	11/8/91	X							X				chan.3 high
10	1/16/92			Х				X					spur. fast
11	1/20/92			X				X	-				spur. fast
12	1/23/92			X			-	X		1			spur, fast
13	1/29/92			X				X		1.1.1			spur. fast
14	4/2/92			X						X			spur. high
15	6/2/92			X				X					spur. fast
16	6/16/92			X				X					spur.3 high
10	07 + 07 24			1					-	1			
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