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BIBLIOGRAPHY
SNAP AEROSPACE NUCLEAR SAFETY
PROGRAM REPORTS

20705

AEC Research and Development Report

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Atomics International
North American Rockwell

P.O. Box 309
Canoga Park, California 91304

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I. INTRODUCTION

The participation of Atomics International, a Division of North American Rockwell Corporation, in the USAEC Aerospace Nuclear Safety Program was initiated in the latter part of calendar year 1961. The AI program was established to assess the safety of SNAP (Systems for Nuclear Auxiliary Power) reactors, specifically SNAP 10A, 2, and 8 nuclear power systems. The objectives of the program were to demonstrate, by means of analysis and experiments, that these SNAP reactors meet specified safety criteria and to verify that these criteria are adequate to provide the safety requirements consistent with the use of each SNAP system.

To attain these objectives, the Aerospace Nuclear Safety Program at Atomics International was divided into three major areas of investigation:

1) Reentry and Abort Studies:

- a) Reactor Disintegration Experiments and Analysis,
- b) Fuel Ablation and Fuel Element Reentry Burnup Experiments and Analysis,
- c) Fuel Ablation and Particle Formation Experiments and Analysis,
- d) Fuel Properties,
- e) Impact Analysis (Mechanical and Thermochemical Effects), and
- f) Reactor Disposal Experiments and Analysis.

2) Nuclear Studies:

- a) Reactor Transient Experiments and Analysis,
- b) Critical Configuration Experiments and Analysis, and
- c) End -of-Life Shutdown.

3) Program Evaluation

This report is a bibliography of all reports published by Atomics International under the Aerospace Nuclear Safety Program since its inception. The entries in Sections II, III, and IV are organized in the same general arrangement as the program organization outlined above. Thus they may be found by subject matter or areas of interest. The reports in each category are listed in chronological order. Progress reports and reports pertaining to the general overall program are entered in Section V.

The following types of reports are included.

NAA-SR-	Technical Data Report
NAA-SR-Memo-	Technical Data Report
NAA-SR-TDR-	Technical Data Report
AI-AEC-	Technical Data Report
AI-AEC-TDR-	Technical Data Report
TI-	Technical Information Report
DTP-	Development Test Procedure
TP-	Test Plan
TR-	Test Report
WPL-	Work Plan

II. REENTRY AND ABORT STUDIES

A. REACTOR DISINTEGRATION

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DECAY PERIOD, R. D. Elliott and J. W. Baughn, 5-4-62

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ENTRY AND DISCUSSION OF A PROPOSED TEST, W. O. Ackerman,
P. D. Arthur, and D. K. Nelson, 8-3-62

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AND AERODYNAMIC HEATING, P. D. Arthur and R. D. Elliott,
4-4-63

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W. E. Nagel, 4-23-63

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L. Montgomery, 8-5-64

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SUMMARY OF S8DR-TYPE SYSTEM REENTRY ANALYSIS, G. F. Burdi,
11-16-65

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AND FUEL ELEMENT SEPARATION, E. Mouradian, 2-16-66

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DATA AND TEST RESULTS FOR AEROSPACE SAFETY ARC-JET SYSTEMS, J. Caldwell and S. Pintoul, 1-3-64

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