

INTERIM REPORT

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Monthly Highlights

for

November 1978^{*}

Light Water Reactor Thermal Hydraulic Development Division

Budget Activity 60-19-10-01

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NRC Research and Technical
Assistance Report

^{*} Work carried out under the auspices of the United States Nuclear
Regulatory Commission.

1.1 Analytical Modeling (B.J.C. Wu)

Possible mechanisms of bubble formation near the pipe walls were examined to determine if the results of application of our model to Reocreux' experiment data may be correlated to the flow boundary layer characteristics.

1.2 Test Section Seal Development (W. J. Leonhardt and J. H. Klein)

Testing of the KALREZ and a new silicone material continues. Design of testing jigs for other seal concepts is also continuing.

1.3 Densitometer (N. Abuaf and W. Leonhardt)

Samarium material has been received and is currently being evaluated to determine if Samarium can replace Thulium in the event Thulium material can not be obtained in pure enough compounds. Welding problems with the source capsules have required a change of capsule design which has been accomplished.

1.4 Flashing Experiments (N. Abuaf, B.J.C. Wu, G. A. Zimmer,
and J. H. Klein)

All the sensors, thermocouples, RTD's and pressure transducers used for operation control and data acquisition were calibrated. This is a routine calibration that we would like to perform before and after each set of flashing experiments. The traversing mechanism for single channel γ -densitometer and the densitometer itself are being debugged for the void fraction measurements.

1.5 Data Acquisition and Analysis Software (G. A. Zimmer)

In response to NRC's request, a letter was drafted to review and comment on the UPTF Data Analysis System.

Distribution Light Water Reactor Thermal Hydraulic Development Program

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