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#### INTERIM REPORT

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NRC Research and Technical Assistance Report Monthly Highlights

for

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Thermal Hydraulic LMFBR Safety Experiments

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<sup>\*</sup> Work carried out under the auspices of the United States Nuclear Regulatory Commission.

#### 1. Thermal Hydraulic LMFBR Safety Experiments

# 1.1 Hydrodynamic Characteristics of Two-Phase Dispersed Systems (T. Ginsberg, G. Zimmer, J. Klages; J. Chen, Lehigh University)

The dispersal apparatus was reassembled after modifications to seal the test vessel were completed. Computer control of the gamma densitometer traversing apparatus has been implemented.

### 1.2 HCDA Bubble Energetics (J. Moszynski, U. of Delaware; T. Ginsberg)

A draft of the report "Effect of Dispersed Condensed Phase on the Rayleigh-Taylor Instability of a Gas-Liquid Interface" has been completed. A copy of the draft was handed to D. Basdekas. An informal report is in preparation.

#### 1.4 Fuel Motion Studies (G.A. Greene)

A final report is being prepared concerning the two-phase solidification experiments. The reporting date has been extended to 5-31-80 due to the 4-22-80 meeting scheduled at ARSR headquarters. Planning for the continuation of the fuel motion phenomenology program began.

## 1.5 Heat Transfer in Internally Heated Pools (G.A. Greene)

A final formal report BNL-NUREG 51157 (NUREG/CR 1357) was transmitted to NRC on 3-25-80.

1.6 Transition Phase Technology Assessment Report (G.A. Greene, T. Ginsberg; M.S. Kazimi, MIT)

An informal report was transmitted to NRC on 2-29-80.

# Distribution Thermal Hydraulic LMFBR Development Program

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