

2. Diet and Lifestyle Study

- a. All available reports concerning fallout on Ailinginae, Rongelap, Rongerik and Utirik have been examined and pertinent information has been collated into one location. The data collected concerns external radiation measurements, radionuclide concentrations in soil, water, vegetation, animals and food items. In addition, efforts are being made to collect information on whole body analysis and bioassay samples.
- b. A recent diet and lifestyle study completed in November 1978 will provide a firm basis to estimate internal and external doses.

3.  $^{129}\text{I}$  Study

- a. Historic samples collected by University of Washington during the period 1954-1974 have been analyzed for  $^{129}\text{I}$  (Table 4). These samples are also being analyzed for  $^{99}\text{Tc}$ . Information from Item 8 (Methods of Study) will be required to correlate the findings. Additional samples from these areas (Rongelap, Rongerik, Utirik) will be analysed for  $^{129}\text{I}$  and  $^{99}\text{Tc}$  if required. In addition, we are exploring the possibility of analyzing "Bikini-ash"-the fallout that settled on "The Lucky Dragon". This sample should provide the most accurate description of the fallout.

4. 'State-of-the-Art' Computer Simulation

- a. All available data pertaining to meteorological conditions before, during and after the BRAVO test have been collected and transmitted to Lawrence Livermore Laboratory for the computer analysis. These results should be available by February/March 1979.
- b. A recent Marshall Islands Radiological survey completed in December 1978 should provide iso-dose lines for recent times. Comparison of the two plots should be very valuable in assessing 1954 observations.

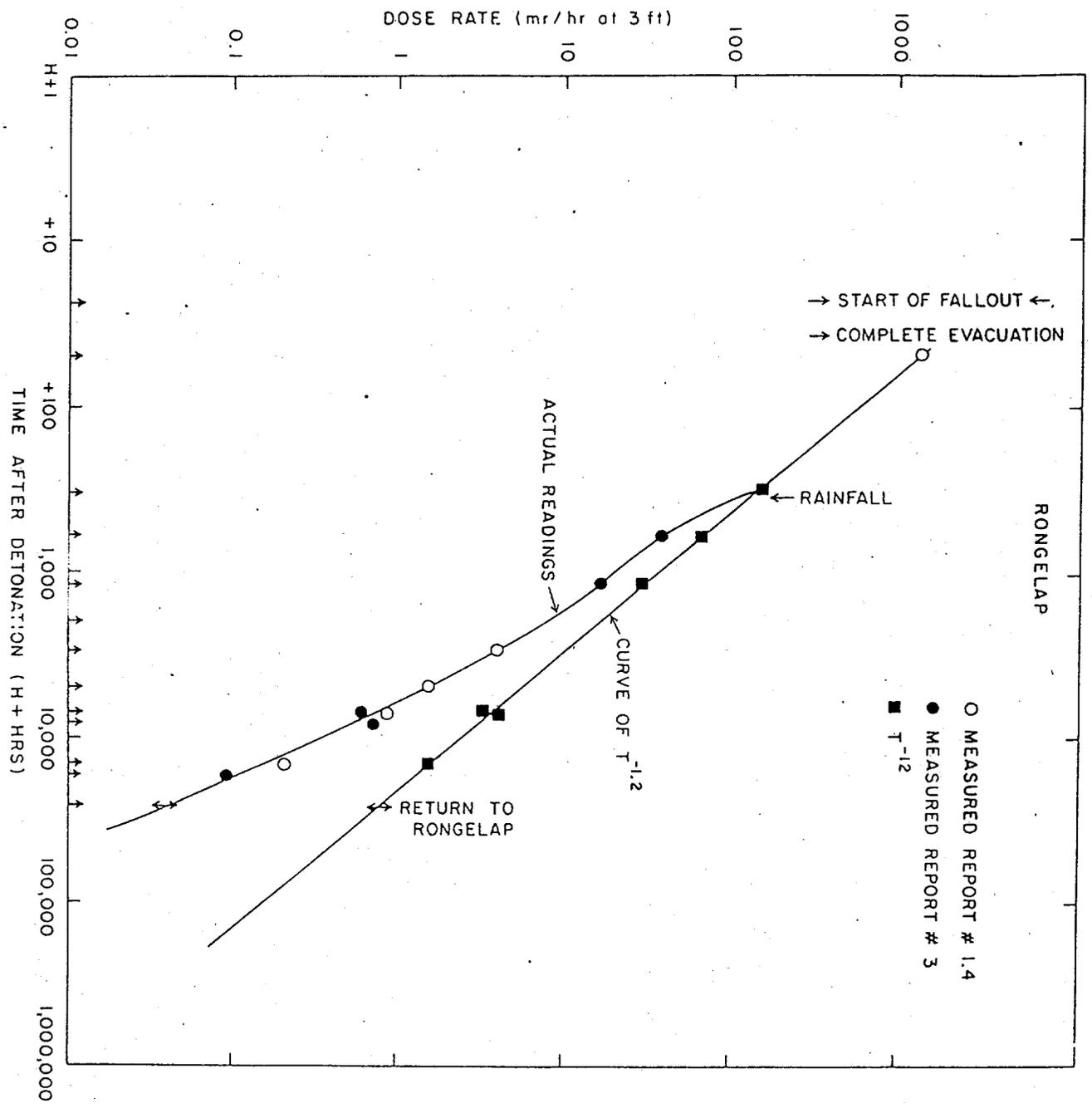
5. Discussions are being continued with the scientists and technical people who were involved during Operation Castle.

Table 4

<sup>129</sup>I Radiochemical Analysis Results\*

DATE	I-129 ATOMS/G	PCT ERROR	I-129 ATOMS/μG	PCT ERROR	COMMENTS
32654	4.44E+10	3.4	2.77E+09	4.5	ISLAND SOIL, (SAND), TOP 1 INCH, RONGELAP-LABARDZ
71654	4.80E+10	3.6	3.88E+09	5.8	ISLAND SOIL, (SAND), ALMOST NO HUMUS), RONGELAP-KABELLE
12955	1.33E+11	4.2	3.65E+09	6.8	ISLAND SOIL, (SAND), RONGELAP-KABELLE
12555	1.53E+11	3.4	7.77E+09	6.9	ISLAND SOIL, (SAND), RONGELAP-RONGELAP
102255	2.24E+11	3.1	1.52E+10	6.5	SOIL, (SAND), SUBSAMPLE SPECIMAN A-12) RONGELAP
102255	1.73E+10	4.2	1.59E+09	5.7	SOIL, (SAND, FROM BOTTON OF WELL), RONGELAP ATOLL
102255	2.98E+10	3.5	9.72E+08	6.1	SOIL, (SAND, SUBSAMPLE SPECIMAN A-9), RONGELAP
72456	4.73E+10	3.7	2.60E+09	6.4	MID ISLAND SOIL, (SAND 0-2"), RONGELAP-KABELLE
72356	2.02E+10	3.3	1.10E+09	6.3	SOIL, (SAND 0-2", POSS. FALLOUT CONTAM.), RONGELAP-RONGELAP
72356	1.12E+10	3.2	4.58E+08	5.6	SOIL, (SAND 0-2", MID ISLAND CLEARING), RONGELAP-RONGELAP
71857	7.60E+10	3.8	4.17E+09	6.6	ISLAND SOIL (SAND, RANDOM TOP INCH), RONGELAP-KABELLE
71757	2.13E+10	3.5	1.90E+09	4.6	SOIL (SAND, RANDOM TOP INCH, E 1/2 OF ISLAND) RONGELAP
12355	4.14E+09	7.5	1.52E+08	10.9	ISLAND SOIL (SAND) UTRIK ATOLL
12355	9.31E+08	6.7	4.45E+07	8.3	BLACK BEACH SAND, UTRIK ATOLL
112874	3.82E+09	3.3	2.22E+08	4.3	SURF, SOIL, 0-2.5 CM, SW TRANSECT, RONGERIK-ENEWETAK ISLAND
112874	6.13E+09	3.4	3.73E+08	5.2	SURF, SOIL, 0-2.5 CM, NE TRANSECT, RONGERIK-ENEWETAK ISLAND

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Done by PNL, Hanford, Washington



1979

