

SAMRADI, SUBJ: Disbursement of Funds for Project 39.6 under 7-611-125A

construction of two light frame dwellings and the measurement of air dose at various positions in and around these houses. This project at the Nevada Test Site is being conducted under the auspices of the AEC and is supervised by Mr. Robert L. Corsbie, Program Director, CETG.

3. One other source of pertinent information is the wealth of animal data that has accrued. For many years the School of Aviation Medicine has maintained a colony of macaca rhesus which have been subjected to ionizing radiation of various types and in many dose schedules, both acute and chronic. These have been followed for both acute and chronic effects. It is felt that if any extrapolation from animal to man is made, the monkey offers better chance of validity than any other experimental animal, due to the similarities of physiological and anatomical features.

4. A study currently being accomplished by SAMUSAF is the evaluation of the effects of radiation on the monkey from a bomb spectrum which is delivered under conditions approximating those which obtained during the bombing of Hiroshima. The monkeys will be followed for the same type of acute and chronic effects as were studied in the Japanese. It is believed that this will validate the extrapolations of data concerning the chronic effects of low doses of ionizing radiation from monkey to man.

5. Dr. A. C. Upton of ORNL for some years has been conducting a research program which is investigating the chronic effects on mice of low doses of neutron and gamma radiation. The end points of concern are life shortening, leukemia (and other cancer) production, cataract formation, and possibly genetic and sterility effects. It has been found that aminoethylisothiuronium (AET) compounds have shown some promise in the prevention of early radiation death in the mouse. The 125A Weapons Systems Group has seen fit to subsidize this research program during FY 1958.

6. A breakdown of the disbursement funds in the amount of \$200,000 which were originally allotted to the School of Medicine is as follows: (1) \$104,750 was transferred to the AEC for partial support of the field program of Operation Plumbbob; (2) \$40,000 was allotted to support the research program of Dr. A. C. Upton at ORNL; (3) \$18,000 was used to purchase monkey cages necessary for transportation and field testing; (4) \$8,000 purchased an automatic spectrophotometer which rapidly reads the results of the chemical dosimetry; (5) \$29,250

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was used to purchase monkeys and incidental supplies utilized in the
biological experiment conducted by SAMUSAF at the Nevada Test Site.

7. In June of 1957 a further \$100,000 was allocated by ARDC
to the School of Aviation Medicine, USAF, for the balance of the funds
needed to support Dr. Upton's contract at ORNL for FY 1958.

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