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June 28, 1963

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MONTHLY REPORT
JUNE, 1963

1. The following Laboratories were visited: Oak Ridge Nat'l. Lab., Institute of Industrial Medicine; New York University and Brookhaven National Laboratories. Interlaboratory calibration thyroid measurements were made at New York University and Brookhaven National Laboratory. Measurements agreed to within three percent.
2. The Eighth Annual Meeting of the Health Physics Society was attended.
3. Authorization was given to EDPO to construct a program to assemble by name all bioassay results chronologically since 1958. The program definition was supplied also. The estimated cost is between \$1000 and \$2500.
4. The Symposium on the Radiobiology of Iodine was attended. A paper of which the writer was a co-author entitled "Effect of Varying Stable Iodine in Diets of Cows Fed I¹³¹ on Uptake of I¹³¹ In Man Drinking The Milk" was presented by E. C. Watson. This paper summarized the findings of the I studies performed thus far.
5. An investigation of the I¹³¹ in thyroid measurement capabilities of the 11 x 4 NaI xtal in the Shadow Shield WBC was made. A fifteen minute count directly under the detector will disclose the presence of about 0.5% of the Maximum Permissible Organ Burden. By comparison a 15 minute count with the 3 x 3 NaI detector in the iron room will disclose about 0.05% of the MPOB on the same basis.
6. During the HPS meeting, visits and the I Symposium many contacts were made. These have been supplied for inclusion in the Visitors Report.
7. The manuscript Ringold-A Hanford Environmental Study was not presented at the HPS meeting. The manuscript is being titivated in preparation for local publication. After publication, releases will be sought from the various persons included in the study to permit publication in the open literature. Although we referred to the participants only by initials, Legal Counsel has suggested that there may be some invasion of privacy and that releases are required.

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8. Several persons attending the Iodine Symposium wanted to be counted as a part of interlaboratory checks. Of these the writer counted 7. The results have been sent to these persons by mail.
9. Again the lack of data from the laboratory prevented the necessary EDPM System check such that the H³ program could be made operational.
10. A shield is yet to be constructed for the Thyroid counter with which exclusion of radiation from body parts other than the thyroid may be accomplished.
11. In view of the excellent agreement with other laboratories on thyroid measurements the need for a "V" type thyroid counter will require more thought. The construction therefore is postponed indefinitely.

Activities for July

1. Make H³ program operational
2. Assist in preparation of Exposure Records - EDPM System
3. Continue I Studies
4. Publish Ringold Paper
5. Prepare revised Handout for Hanford Whole Body Counter

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