AIR3.950109.011

Mr. Allen/3470/4 Aug 69/bl

SMRP

4 August 1969

Trip Report (SO #TAA-1441)

SMGE
SMGS
SMS
IN TURN

1. A TDY to NASA-MSC was accomplished by the undersigned on 23 July 1969. Mr. Bob Richmond and Dr. Don Robbins were contacted.

2. Apollo radiation dose measurements were discussed with Mr. Richmond. Copies of the dosimetry reports for Apollo 8 through 10 were obtained. It was ascertained that the radiation dose for Apollo 11, as monitored by the personal radiation dosimeter, was 160 MRAD through noon of 23 July.

3. Cross calibration of the NASA-MSC/SAM radiation sources was discussed. Tentative plans were made to conduct Phase I of this cross calibration on 15 August. This would include measurement of depth dose utilizing SAM phantoms and cross calibration of NASA and SAM owned Victoreen R chambers.

4. Phase II would include cross calibration of NASA and SAM standard dosimeters on a new Cs^{137} source which NASA is in the process of purchasing and comparisons with a Victoreen intercomparison standard which NASA is in the process of purchasing. These measurements would be repeated on the General Dynamics Co^{60} source which is used to make the initial calibration of the Apollo radiation survey meters and personal radiation dosimeters. This work will be tentatively scheduled for early fall and will be firmed up after NASA receives their instruments.

5. Dr. Robbins was contacted regarding the measurements which have been made thus far in Solar Cycle #20. No solar proton event of any consequence has been monitored during this cycle and the predicted peak period of activity should occur prior to the end of 1970. Solar activity, as measured by smoothed sunspot numbers, is lower at this point in the cycle than for any other recorded cycle. Smoothed sunspot numbers are 120 now as compared to 360 for the same period of Solar Cycle #19. It may be too soon to speculate on the remainder of Solar Cycle #20, but at this point, it would seem that the possibility of a large solar proton event occurring during this cycle is decreasing.

6. This TDY was successfully completed on 23 July 1969.

Lt Col Dan Brown
HQ AFMDA/SGPT
202-767-5018
Biological Effects Rad
13A5310-B04

Suitland Records Ctr

ED
ALLEN
ace Radiation Function
Physics Branch

SMR ADMIN