MEMORANDUM FOR THE RECORD

SUBJECT: Soviet Microwave Permissible Doses

1. Dr. [redacted] requested that F provide him with the latest possible Soviet figures for the maximum permissible dose levels of microwave radiation. He gave his figures for the Soviet limits as 10 microwatts per square centimeter for continuous exposure, 100 microwatts per square centimeter for two-hour exposure or so-called periodic exposure, and one milliwatt per square centimeter for 20 minutes also periodic exposure. These data were given in a 1958 Ministry of Health, USSR, regulation.

2. A search of recent literature indicates that by and large most Soviet investigators still utilize the Ministry of Health-Z. V. Gordon figures which are quoted above. They generally compare these with the U.S. stated figures of 10 milliwatts. All of these limits are given for the centimeter range microwaves since 10-centimeter waves seem to be the most damaging to biological tissue. In a recent issue of the Military Medical Journal (Voenno-Meditsinsky Zhurnal) #9 for 1964, pages 22-26, there appeared a new set of values for Soviet permissible limits. Again these figures are for centimeter range microwaves. They are: 10 microwatts per square centimeter for 8-hour day continuous exposure; 100 microwatts per square centimeter for two-hour maximum periodic exposure; and one milliwatt per square centimeter for 12-25 minutes maximum with goggle protection for the eyes. These figures are taken from a 1959 Ministry of Health publication the title of which is Vremennye Sanitarnye Pravila Pri Rabote s Generatorami Santimetrovykh Voln.
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3. I believe that these later figures are still in force for the USSR. We will notify if we find any change in an official Soviet publication.