

POOR QUALITY ORIGINAL

1976-1977

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Washington, D. C.

400111

322 John;

Enclosed are five copies of a memo addressed to me listing and explaining the individual exposures in excess of 2.0 rads per hour personnel participating in Operation Buster-Jangle. May I request that you forward one of these copies to Col. Harrington so that he may take the necessary steps to insure that none of these people again get overexposed at the forthcoming operation. I have promised him that the information would be supplied to him.

I would like to make a few comments of my own concerning these cases. First of all, it should be borne in mind that 13 overexposures out of a total of somewhere around 2,000 people is not a bad battery average. This of course would be a meaningless statement if we did not hasten to add that in no case was the overexposure as high as twice the permissible limit. It also point with a certain amount of pride to the fact that no Los Alamos staff member received an overexposure, and neither did any one of the monitors whom we had indoctrinated. I feel very strongly that this emphasizes the importance and necessity for the rigid training and indoctrination of monitoring and scientific personnel alike.

Let me comment very briefly on the four episodes in which over-subscriptions were received:

1. Frankly we are surprised that the Air Force men engaged in cloud sampling operations did not receive greater exposures than they did. This was one project where we frankly doubted our ability to hold our exposures below an arbitrary level. It is of considerable interest that the three men listed all occupied the same location in a B-17 and were the only men in the various crews to pass the accepted limits. The pilots of the jet planes were in no cases overexposed. Cloud sampling operations will always present a problem, and we are greatly indebted to Col. Carl Houghton for the excellence of his supervision of this phase of the work. We are currently working with him to develop an instrument which can easily be read by a plane pilot and which will tell him his integrated exposure up to that time. 1

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2. The party of six individuals listed in this paragraph was principally a Desert Rock group. You will realize that an E-287 operation was in the process of well up, and its last

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Mr. W. L. Bugher

February 12, 1951

so available members of our organization party. This mission sounded similar enough, and so we agreed that it would go out with Major Gibson, an old-timehouse hand, serving as monitor. Because of the lack of specific indoctrination he forgot to take into account the commanding factor, although it had clearly worked on his pocket bookmen. Of course we were sensible, but I feel that the aftermath of the overexposure must have been this episode also grants me the benefit of permission to do all previously scheduled, and where all of us have had the above necessary training, to go into the contaminated area.

3. Here again we see the danger of depending on a monitor with inadequate training and experience. The monitor in this particular instance was one of the men who was thrust upon us by the military in this service between Butler and Jangle. It points out the fact that militaries, while they could not expose themselves unnecessarily, must know precisely the exposure being received by the men under their control. This, too, was an unscheduled mission which did not have to be done.
4. This was really the only case where the overexposure resulted from a series of little exposures. The two men involved had been on numerous recovery operations, and it was the last one that pushed them over the limit. This of course is the situation where we would expect most of our overexposures to arise, and I regard it as a very creditable record that we prevented similar overexposures in all save these two instances. Here I feel that most of the credit should be given to our Photo Dosimetry and Records Section who every morning had the total exposure through the previous day listed. It is a thankless job but an essential one and requires more people than one might anticipate in advance.

I trust that the information contained here is what is needed. Will you be good enough to see that the interested parties, Walter Claus and others, get copies.

Very sincerely yours,

Tom
THOMAS L. SHIPMAN, M. D.
Health Division Leader

ES:plw

Incl. Five copies of memo from W. R. Kennedy to T. L. Shipman. Dated Feb. 10, 1951

Distribution: Dr. John Bugher (4) [redacted]
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