

William Ogle, J-80

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THIS DOCUMENT CONSISTS OF 3 PAGES

T. L. Shipman, M. D., Health Division Leader

RADIATION DOSES FOR CLOUD SAMPLERS, OPERATION HARDTACK

M-269

BEST COPY AVAILABLE

This is to bring to your attention the memo, a copy of which is attached. I feel that considerable care should be taken that the philosophy and procedure advocated in that memo are not approved unless and until the matter has been given careful consideration. The memo in question states that the group of sampling planes in Operation Hardtack may require even more dosage allowance than has been given in the past. The reasons given for this are that there will be more shots to be sampled and that there will be a larger number of high-yield shots at Bikini. Let us consider these points before we move on. At no time have permissible doses ever been established on the basis of the length of an operation. Since the cheerful days of Operations Ranger and Greenhouse, tests have become progressively longer, involving a greater number of man-roentgens of exposure. In general this situation has been met by utilizing a larger number of men and spreading the dosage out between them. Practically all participating organizations have appreciated this difficulty and have solved it one way or another. If we have come to the point where permissible doses are fixed purely by expediency, we can no longer say that we have any radiologic safety program.

In paragraph 3 the enclosed memo says, "During Redwing a limited dosage of twenty roentgens (20r) was established for sampler crews". This is a misleading statement. I refer you to the memo to you from Gordon Jacks dated 23 October 1955, a copy of which is also attached (the classification of this memo has been downgraded to "Official Use Only" as of today by Les Redman). It should be perfectly plain from this memo that the authorized dose for the aircrews is no more than ten roentgens (10r). The upper limitation of 20 roentgens (20r) was simply to provide some leeway in the event of a quite unexpected and unforeseen situation. I feel that the interpretation given in paragraph 3 of the memo from Task Group 7.4 is incorrect and unwarranted.

Paragraph 6 of the memo from the Deputy Commander of Task Group 7.4 says that many of the sampler crews who will be involved have also received not inconsiderable exposure to radiation during Operation Flumbob. It appears that some of them participated not only in Flumbob but in Teapot and Ivy. To me this is all the more reason why we should be extremely hesitant to permit these same men to receive even technical overexposure.

DEPARTMENT OF ENERGY DECLASSIFICATION	
1ST REVIEW DATE: 07-2-97	DETERMINATION (CIP)
AUTHORITY: EAOB EADC OADD	1. CLASSIFICATION
NAME: <i>Shuman</i>	2. CLASSIFICATION
2ND REVIEW DATE: 12-2-97	3. CONTAINS NO
AUTHORITY: ADD	4. COORDINATE
NAME: <i>R. Carpenter</i>	5. CLASSIFIED
	7.0. FR

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After all, this is not a combat situation nor are these training missions, which are pretty much the responsibility of the Air Force. Planes and crews furnished by the Air Force in this situation are simply providing a service for Task Group 7.1 in carrying out an anticipated and planned diagnostic test. One might argue that all participating personnel should be kept to the same 1.5r limitation with the rest of the Task Force. A number of years back it became obvious that it was simply impossible to carry out the project with this restriction. Diligent thought and effort went into methods and procedures which would reduce the dosage to the sampler crews and as a matter of fact, quite a bit was accomplished although these gains were usually wiped out by having the next operation longer and more complex. In this situation of course we must take advantage of every opportunity to reduce exposures, and I might point out that this includes the routine decontamination of aircraft involved.

It should be well to bear in mind that no recommendation which I make can carry official weight. I have no authorization to permit doses to those for whom I am responsible beyond the point stipulated by the Division of Biology and Medicine of the AEC. Furthermore, DPM itself has no machinery which permits it to 'authorize' exposures greater than the numbers which they have already published. In the past these larger exposures have simply been approved by the Task Force Commander without the approval or disapproval of the AEC. None of this, however, prevents me from making my personal recommendations, and these are as follows:

- (1) I recommend that the crews of the sampling aircraft in Operation Hardtack follow precisely the same recommendations as those imposed upon them or permitted for them in Operation Redwing, and that their authorized exposure be 15r with an absolute limitation of 20r.
- (2) I recommend that the past exposure records of the participating Air Force personnel be reviewed by a qualified Medical Corps Officer to determine whether or not additional exposure above a level of 5r per year may properly be recommended.
- (3) I urge that consideration be given to fixing the responsibility for radiologic safety for the personnel of Task Group 7.1 who will be participating in Project 2.8B. This is a

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si situation where we certainly miss Earl Houghton.

- (4) After considering this matter, I suggest that you transmit your recommendation to the Commander of the Task Force, bringing it to the attention of Major Richie.

ORIGINAL SIGNED BY THOMAS L. SHIPMAN, M. D.

T. L. SHIPMAN, M. D.
Health Division Leader

TLS/ehb

cc: Colonel W. B. Keefer 2/7A
Major Gordon Jacks 3/7A
Dr. Harold Flank 4/7A
Colonel Ralph LeCours 5/7A
File 6/7A
M+R 7/7A