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Research and Development Board

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COMMITTEE ON CHEMICAL WARFARE

Transcript of the Fourteenth Meeting
Held 10 November 1952, in Room 3E-1060
The Pentagon

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Conference Reporting Section
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RESEARCH AND DEVELOPMENT BOARD
COMMITTEE ON CHEMICAL WARFARE

Transcript of the Fourteenth Meeting
 Held 10 November 1952, Room 3E-1060 -
 The Pentagon

Present:

Members:

Dr. Randolph T. Major, Chairman
 Dr. J. B. Austin
 Dr. Henry F. Johnstone
 Brig. General Charles E. Loucks, USA
 Colonel Leo W. Cather, USA
 Rear Admiral R. E. McShane, USN
 Captain J. P. Costello, USN
 Colonel Robert T. Fincke, USAF
 Lt. Col. Otto J. Glasser, USAF

Alternates and Deputies:

Dr. Allan P. Colburn
 Lt. Col. Chester M. Freudendorf, USA
 Captain G. G. Molumphy, USN
 Commander I. K. Blough, USN
 Lt. Col. H. A. Templeton, USAF
 Major Kirby C. Penn, USAF

Associate Members:

Colonel M. W. Bayliss, MC, USA
 Colonel Fred J. Delmore, USA
 Colonel Marshall Stubbs, USA
 Lt. Col. Thomas E. Marfing, USA
 Commander H. S. Etter, MC, USN
 Commander T. R. Johnson, CEC, USN
 Colonel C. R. Boyer, USMC
 Lt. Col. G. E. Moore, USMC
 Dr. Eugene Ranskill, Navy
 Colonel Harold J. Crumly, USAF
 Lt. Col. W. W. Hurt, USAF

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Panel Chairmen

Dr. R. M. Burns
Dr. E. Duer Reeves
Dr. L. A. Sweet

Secretariat:

Dr. H. M. Worthley, Executive Director
Mr. Paul Kopp, Deputy Executive Director
Lt. Col. Alexander Batlin, USA, Army Secretary
LCDR F. A. Chevrefils, MSC, USN, Navy Secretary
Colonel C. E. Breedlove, USAF, Air Force Secretary

Others Present

Dr. Thomas Alphin, FCDA
Colonel W. Anderson, USAF, AFOAT
Colonel R. W. Breaks, USA, CmlC
Dr. Gordon Bushey, CmlC
Major John Chasteen, USAF, AFOAT
Captain S. G. Christie, USN, JCS
Dr. C. R. Clark, ORO
Colonel J. T. Clark, USAF, AFOAT
Colonel W. R. Currie, USA, CmlC
Major Ira Ferguson, USAF, AFOAT
Dr. Robert Fox, CmlC
Mr. L. G. Garons, CmlC
Lt. Irvin L. Gold, USAF, ARDC
Lt. Colonel W. S. Hutchinson, Jr., USA, CmlC
Mr. K. T. Johnson, USAF, A-2
Dr. C. B. Marquand, CmlC
CDR. T. W. McConville, USN, CO, Navy Unit, Edgewood
LCDR J. S. McNulty, USN, OSD
Dr. Floyd Miller, RDB
Lt. Col. F. B. Mitman, Jr., USA, OSD
Major E. D. Smith, USAF, OSD
Dr. Henry Stubblefield, CmlC
Captain D. J. Sullivan, USN, RDB
Dr. E. B. Wilson, WSEG
Miss Marjorie Martin, Recorder
Miss Mary Selby, Recorder
Mr. Albert J. Gasdor, Jr., Recorder

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THE CHAIRMAN: "And the further development of the E-51 for civilian protection, and then a supplementary paper be prepared by the staff.

Is that agreeable to the Committee? Very well. Now is there anything on protective clothing, any other comment under 28?

Well, if there are no comments, how about Collective Protection? Nothing there? Can we go on, then, to 29? No comments, no changes in 29? Well, then, if not, we come to the toxicological and medicinal aspects of chemical warfare, and we have No. 30, Objectives of the Program. Any suggested changes for objectives? There is no objection to 30? Then we will go to 31, then, Need for Human Volunteer Test Subjects.

Now the Chairman of the Panel on Medicinal and Toxicological Matters is not here. I don't know whether anyone from the Medical Division or General Loucks would care to say anything about these matters or not.

Colonel Bayliss, is there anything you'd care to say on any of these matters?

COLONEL BAYLISS: On any of these last three or four paragraphs?

THE CHAIRMAN: Well, particularly, as we go through them, if you wouldn't mind confining yourself to the ones

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as we come to them, but I'd be glad to have your comments on any one of them.

COLONEL BAYLISS: We have no disagreement, I don't believe, with any of these. I think there is a little inconsistency in Paragraph 33, though, when we come to that.

THE CHAIRMAN: If there is nothing on 31 or 32 ---

DR. WORTHLEY: Mr. Chairman, Paragraph 31 makes reference to proposals under consideration by the Armed Forces Medical Policy Council .

Since this was written -- in fact just the other day -- we received from the Medical Armed Forces Medical Policy Council, a statement of their recommendations to the Secretary on this matter, and these are being circulated to the RDB committees concerned for consideration and comments. It just happens that they strike us, you might say, at the psychological moment, and I wonder, in consideration of this question, which is a rather important one, in the program, if you'd care to have this document of the Armed Forces Medical Policy Council read?

THE CHAIRMAN: Is it long? [Laughter]

DR. WORTHLEY: About a page and a half.

THE CHAIRMAN: Are you agreeable, gentlemen? The answer is yet. All right.

DR. WORTHLEY: This is on the subject of the use of

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human volunteers in experimental research. Dr. Casberg advises Mr. Whitman this way: "The attached recommendations and supporting conditions pertaining thereto are forwarded for your information and comment. The Medical Policy Council approved the adoption of the recommendations at the 13 October 1952 meeting. These are the recommendations: In view of previous recommendations of the Medical Policy Council that human subject be employed as the only feasible means for realistic evaluation and/or development of effective preventive measures of defense against atomic and biological or chemical agents. The Council further recommends that the following policy be affirmed with respect to the participation of personnel of the Armed Services in the atomic, biological and chemical warfare research programs:

(1) By reason of the basic medical responsibility in connection with the development of defenses of all types against atomic, biological and/or chemical warfare agents, Armed Services personnel and all civilians on duty at installations engaged in such research shall be permitted to actively participate in all phases of the program. Such participation shall be subject to the following conditions: (1) Voluntary consent of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent and should

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be so situated as to be able to exercise free power of choice without the intervention of any element of force, fraud, deceit, duress overreaching, or other ulterior of constraint or coercion. He should have sufficient knowledge and comprehension of the elements of the subject matter involved as to enable him to make an understanding decision. This latter element requires that before the acceptance of an affirmative decision by the experimental subject, there should be made known to him, the nature, duration and purpose of the experiment, the method and means by which it is to be conducted, all inconveniences and hazards reasonably to be expected, and the effects on his health or person which may possibly come from his participation in the experiment. The consent of the human subject shall be in writing. His signature shall be affixed to a written instrument setting forth substantially the aforementioned requirements and shall be signed in the presence of at least one witness and shall attest to such signature in writing. The duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs or engages in the experiment. It is a personal duty and responsibility which may not be delegated to another.

(2) The experiment should be such as to yield fruitful

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results for the good of society, unprocureable by other methods or means of study, and not random and unnecessary in necessary.

(3) The experiment should be so designed and based on the results of animal experiments and a knowledge of the natural history of the disease or other problems under study, that the anticipated results will justify the performance of the experiment.

(4) The experiment should be so conducted as to avoid all unnecessary physical and mental suffering.

(5) No experiment should be conducted where there is an a priori reason to believe that death or disabling injury will occur.

(6) The degree of risk to be taken should never exceed that determined by the humanitarian importance of the problem to be solved by the experiment.

(7) Proper preparation should be made and adequate facilities provided to protect the experimental subject against even the remote possibility of injury, disability or death.

(8) The experiments should be conducted only by scientifically qualified persons. The highest degree of skill and care should be required through all stages of the experiment, of those conducting or engaging in the experiment.

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(9) During the course of the experiment, the human subject shall be at liberty to bring the experiment to an end if he has reached the physical or mental stage where the continuation of the experiment seems to him to be impossible.

(10) During the course of the experiment, scientists in charge must be prepared to terminate the experiment at any stage if he has probable cause to believe that the exercise of good faith, superior skill and careful judgment required of him, that a continuation of the experiment is likely to result in injury, disability or death to the experimental subject.

(11) Whereas, prisoners incarcerated in field institutions, may and have been used if the required conditions are met, prisoners of war will not be used in human experimentation."

DR. JOHNSTONE: If they can get any volunteers after that I'm all in favor of it.

[Laughter]

THE CHAIRMAN: Yes, Colonel Bayliss.

COLONEL BAYLISS: I might point out that we have been running voluntary experiments for a long period of time. We do have difficulty in getting volunteers. Most of the volunteers are from our own medical laboratories, and

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when we try to go outside of medical laboratories, we have great difficulty, but we gotten volunteers for a limited number of experiments that we have conducted, mostly from our own group. The moment we try to go out of our own place, even for an experiment that there is no danger at all, go to something like the Training Command, we are immediately turned down. It takes too much time and they can't be bothered with it. That always happens, and it doesn't really give us any means of obtaining volunteers, other than medical laboratories, but it might be difficult to say that there was no coercion used. They worked there. Their salary depends upon it.

If we go over to Chemical and Radiological Laboratories we get no volunteers. If we go to Research and Engineering Command, we get no volunteers. Within our own place, though, we do get some. [Laughter].

Now there is no reward for volunteering; that's the whole thing. The man who is an office man, he doesn't get a day off. There is no mechanism whereby we can get them. We can't get any extra pay for them. If they should, for some reason, die during these experiments, the people, I might point out, have died from such things as injecting minute amount of novocain. Small amounts of ether will kill an individual who is sensitive to it. You never know

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when you are going to run into somebody who is sensitive. Is there any protection for the man who dies during such an experiment, even though there is relatively little danger, or is there any protection for the experimenter in the legal courts? That is the whole thing that makes it difficult to run these experiments, especially, on a wholesale scale like some people think they should be run. If a man dies on your hands and you are sued for \$100,000 who pays that? That is one thing, and also, if he dies, who supports your relatives that need supporting? There are a lot questions of that nature that are not answered by such things as that. I think that there is always difficulty in getting volunteers.

THE CHAIRMAN: The British use a different system, don't they? They take troops and assign volunteers.

COLONEL BAYLISS: That's right. They do have a system of rewarding now. That is, they pay them so much money and it isn't any large sum of money, but they do have a system of rewarding, but we don't have such a system.

DR. WORTHLEY: Do they have all these restrictions? Are they as much concerned about the legal aspects?

COLONEL BAYLISS: I would think so. They don't run experiments that are extremely dangerous. I think we run experiments that are practically up to the same level of danger, but we don't run them in the same large numbers and

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we do not have the volunteers coming in at all times. I don't know whether they have any greater protection, either for the volunteers or for the experimentors. I think they are about the same.

DR. WORTHLEY: This document I just read was considered by the Committee on Human Resources at their meeting on Friday, and there came in just a few minutes ago this communication from them on the subject. It has their reflections on this matter of the use of human volunteers, if the Committee would like it read.

THE CHAIRMAN: If it is not too long.

DR. WORTHLEY: No, it is just about a page.

All right. Here it is. The Proposed Use of Human Volunteers. "The paper under consideration was presented to a selected number of the members of the Human Resources Committee for discussion. The following analysis of the possible problems which may arise a number of recommendations were made: (a) that every consideration be given to the full exploitation of the law primates, particularly of the anthropoids, for experimentation of this sort. proper attention should be given to the needs of financial support to maintain a supply of animal subjects, particularly anthropoids, since the supply of such subjects of extreme concern in providing tools for such research in this country;

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(b) that the psychologists need to know a great deal more about the necessity for using humans at all, since accidents involving humans are known to have occurred in the data available from such accidents can presumably be utilized, (c) if such experiments are conducted, psychologists would like to impose certain conditions for such experiments, particularly since the stress condition is not believed to be a true one and may well interfere with the elicitation of adequate data and information; (d) the experiments, whether animal or human, if humans are to be used, should not be of a random or similar nature, and should include, where appropriate, psychologists as members of the research group, since attitudes of general behavior of the experimental subject will be involved, and psychologists are very much concerned about such studies; (e) due consideration should be given to the maintenance of safeguards in such experiments in the event human volunteers are used, and some incorporation of a statement in policy document which would indicate (1) the Government's liability in such situations, and (2) the insurance benefits which may accrue the individual or to his family, in the event of accident or death."

THE CHAIRMAN: Well, gentlemen, what position do we want to take with respect to this Paragraph 31? I wonder

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if it would be helpful to us to have the suggestion which Colonel Bayliss would have on this? Colonel Bayliss, do you have anything that you want to suggest to us? You have this Paragraph 31 before you, do you?

COLONEL BAYLISS: Yes, sir, I am in agreement with this paragraph.

THE CHAIRMAN: You are in agreement. Well, is there anything that the Committee would care to do to it? It isn't quite in line with what -- in view of the statement we had read to us, I suppose that they are under consideration, but I suppose that's the statement that's at issue, isn't it?

DR. WORTHLEY: Yes, that's this statement here. We knew that they were considering something, but we didn't have the finished paper.

DR. ANSTIN: I think we can let this stand as it is.

THE CHAIRMAN: Is the Committee agreeable to let it stand as it is?

COLONEL CATHER: Mr. Chairman, I think that, possibly, we might add something to this underlined portion. Inasmuch as it's been indicated that these volunteers aren't protected, legally, and get no pay for it, you might add something to this effect, "and provision be made for hazardous duty pay to volunteers where it is determined that this is appropriate."

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COLONEL FINCKE: According to what the Medical Policy Council put out you can't do it if there is any hazard. I mean, they state you can't do it if there's any chance ---

COLONEL BAYLISS: I think it might be difficult to get it through on that hazardous duty thing because you run into all these requirements that say it must not be hazardous. Well, there is a hazard in everything you do, including crossing the street, and just being any place is hazardous at times, so that I think it has to be some method other than that, and there are large numbers of groups that are trying to get this hazardous duty pay. This will be just one more among many groups that are trying to get it and all that it's going to do is to make it more difficult for those people who are already getting hazardous duty pay. It will just throw them all out, eventually.

THE CHAIRMAN: Colonel Batlin, you had something?

COLONEL BATLIN: I'd like to take the other side to what Colonel Bayliss said. You ask a man to go into a gas chamber filled with GB without a gas mask. It's hazardous getting him to walk through that door and he is entitled, for the moral courage of walking through that door, for hazardous duty pay. Nobody is forcing him to do it, and it is a hazard. It's not like walking across the street.

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One of the ways of getting a good supply of volunteers is to make it profitable for them to risk their lives. We have had accidents. It could happen, that before that goal was opened up again, the man got out. His life would be gone, or he might be left an invalid.

Volunteers could be encouraged very much by recompensation

COLONEL BAYLISS: I agree with what Colonel Batlin has said, except I don't know whether you would be able to get it through.

DR. JOHNSTONE: There is no harm in recommending it.

COLONEL BAYLISS: I think there is some requirement that they spend six days there out of the month, or something like that. I don't know whether they have to spend six days under experiment during the month to collect the pay or not. All these little things ought to be ironed out. Does a man get hazardous duty pay for an entire month for a single day, or does he have to be in six different experiments during the month?

DR. JOHNSTONE: I am not sure that everyone in the room realizes the importance of this. Dr. McGee Harvey pointed out last week that we will not make progress in a lot of these toxicity studies unless we make experiments with human volunteers.

For instance, the question which is mentioned in here,

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Percutaneous effects of GB, has come up just because the British made such experiments, and so this is a serious thing. I don't see any reason why the Committee should not make strong recommendations. The fact is, both the British and Canadians do extensive experiments with human volunteers in mass. It isn't a problem that can be solved by one or two experiments, and if we can strengthen this thing somewhat along the lines that Colonel Cather has suggested, I think it would be well worth our effort and time that we have spent on it.

COLONEL FINCKE: I wanted to determine from Colonel Cather, specifically, the mention of the word "hazardous", whether this was [portion inaudible] or submarine pay, etc., or is this another type of hazardous duty pay?

COLONEL CATHER: I had in mind some similar type of pay. However, I think it could be modified to state something as "an appropriate reward, monetary or otherwise."

DR. WORTHLEY: I have been trying to put some of these thoughts in language here, and thought of the possibility of adding a phrase "be brought to the attention of the Armed Forces Medical Policy Council, and that provision be made for a system of rewards for such volunteers and for . . . of Government liability in case of accidents to include insurance coverage."

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COLONEL BAYLISS: I think that would be perfect.

THE CHAIRMAN: Is that agreeable to the Committee?
I take it there is no disagreement. We can pass on.

COLONEL FINCKE: How much work has been done with anthropoids with GB? Has that been exploited to the fullest?

COLONEL BAYLISS: We used considerable numbers of monkeys, not GB chimpanzees. We haven't used chimpanzees. They are much more difficult to obtain. We could use some. We used considerable numbers of monkeys.

DR. JOHNSTONE: I might point out the Germans used chimpanzee -- apes, they call them -- in testing of GA during the war.

COLONEL BAYLISS: We'd be very glad to use them.

DR. JOHNSTONE: Is this matter of apes and monkeys something we can leave to the experts? Paragraph recommends more attention be given to chemical warfare.

COLONEL CATHER: The second paragraph in 32 is contrary to what the panel put down.

DR. JOHNSTONE: Are you referring to the psycho-chemical fields, Colonel Cather?

COLONEL CATHER: Yes, sir, CPT107/2, Page 2, Paragraph "The figure has been rounded off to 100, for men at rest. It has been established in man that the same per cent of

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