

JOINT CROSSROADS COMMITTEE
NAVY DEPARTMENT
WASHINGTON 25, D. C.

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of line
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17 JAN 1947

Dear Dr. Hemplemann:

The Joint CROSSROADS Committee takes pleasure in inviting you to participate in a symposium on the scientific aspects of Operation CROSSROADS, to be held in Washington on the third, fourth, and fifth of February of this year.

The purpose of the symposium is to apply to the problems of atomic warfare your experience and judgment; to provide for a brief time ready access to the documents of the Bikini tests and facilities for consultation with participants; and to record your findings for the use of the CROSSROADS Committee and the JCS Evaluation Board. In support of these aims, short talks on major topics will be given by some participants; these will be immediately followed by thorough discussion. Some moving pictures of the test will be shown, and other reels will be available as needed to elucidate specific points. Details of bomb construction, stockpiling, or operation will not be discussed.

The Technical Director's Files and other documents of the test will be available for reference. Ample opportunity will be provided for discussion of specific topics by subgroups.

While it is realized that many participants will wish to discuss detailed features of the tests it is hoped that the general papers and discussions, at least, can be confined to the broader issues. The thought is to get away from the narrow confines of Bikini - to consider what may happen at other places and other times, and what should be done about it. We are to try to arrive at an integrated viewpoint on the whole subject. The goal is synthesis of the larger picture rather than analysis of the smaller.

Comments of the participants will be bound, in a top secret volume with an introduction and a summary, as the symposium's contribution to the security of the United States against atomic war. After the symposium you will be requested to record your views on any aspects of atomic warfare which interest you. Your attention is invited to the attached list of suggested subjects.

In the interest of effective informal discussion, and of security, the number of participants is being kept as small as possible. To avoid hurting the feelings of other well-qualified people who might have been invited, it is desired to restrict knowledge of the symposium to those who will actually attend.

Encl:
Suggested Subjects for Comments

Sincerely yours,

Dr. Louis Hemplemann
P. O. Box 1663
Santa Fe, New Mexico

REPOSITORY

W. S. Parsons
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COLLECTION

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BOX No

TRIS 787

FOLDER

OPERATIONAL CROSSROADS

By *March Egan* 1/20/47
(Signature of person making the change, and date)

SUGGESTED SUBJECTS FOR COMMENTS

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Impressions of the Bikini Tests:

What features of the tests impressed you most deeply?

What features of the tests impressed you as most significant?

What should be done differently if the same tests were repeated?

Future Tests:

Are further tests necessary? Desirable?

If there are to be other tests should they be over land or water? What priorities?

If a shallow water test is made what should be the depth?

If a deep water test is held what should be the depth? Should a plume be allowed to form? Should target vessels be used?

Are there other more effective means of speedy radioactive poisons than projecting a large volume of spray into the air by an underwater explosion?

To what extent would an atomic explosion deep in the ground contaminate the surrounding area? An explosion just below ground level?

What would be the nature and radius of damage to modern city buildings from an air shot?

What further scientific work should be undertaken at Bikini?

Future Eventualities:

Is there any likelihood that terrestrial conditions, such as the amount of dust in the upper air, or the radioactive characteristics of the air, would be significantly or permanently changed by a number of atomic explosions?

Is there any likelihood that means will be discovered to enable men to stand much larger doses of radiation than are now considered safe?

Remote Detection:

Assuming all territory now under British or American control to be accessible, what practical means can be employed to insure the detection and location of an atomic explosion anywhere in the world?

Offensive Use:

What is the most effective offensive use of the atomic bomb against ships?

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Countermeasures:

What can be done practically to prepare Naval Vessels for atomic attack?

What are the most effective countermeasures?

Are there any means of protecting harbors against an underwater atomic explosion?

How can a land area best be decontaminated for tactical operations? For long-term use?

How can contaminated cities be best evacuated? Aided?

Strategy and Tactics:

How do present concepts of Naval tactics need to be modified?

What military studies should be initiated now, to prepare against atomic attack?

What sort of atomic warfare indoctrination should young military personnel receive?

Industrial preparedness:

What information is needed by industrial leaders, in order to prepare to support the armed forces in an atomic war?

How should industrial practices and set-ups be modified?

What industries will be vital; which vulnerable?

Civilian preparedness:

What do civilian agencies need to know to prepare for atomic warfare defense?

What factors underlie planning for evacuation of, and help to, bombed cities?

How should educational programs be modified to prepare people mentally for the shock of an atomic attack, and to increase an individual's chance of survival?

Scientific Preparedness:

Which lines of fundamental research should be especially pushed? Which lines could be neglected in order to expedite this?

What is the most effective form of cooperation between the armed forces and scientific institutions?

How many in each of the following categories should be active in preparing for atomic eventualities: (a) mature scientists (b) young PhD's (c) well qualified technicians (d) laboratory assistants? What applied science and development projects should be now considered urgent?