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GENERAL ADVISORY COMMITTEE

TO THE

U. S. ATOMIC ENERGY COMMISSION WASHINGTON 25, D. C.

July 19, 1950

Dr. E. Bradbury Director, Los Alamos Scientific Laboratory Les Alamos, New Mexico

Dear Br. Bradbury:

As you will remember, several members of the General Advisory Committee have had an opportunity to visit Los Alamos during July. They have been deeply interested in the new, more quantitative work bearing on the superbomb, and profoundly impressed with the progress that the Laboratory has made in coming to grips with these problems. We all feel that it would be of the greatest help to the whole effort if we could have, in time for our next scheduled meeting on September 11, a guite informal account of the findings and views of the Laboratory on the superbond problem. Such a report would make available to all members of the Committee a firsthand account of what has been learned and what is planned; it would insure that the Committee's deliberations were based upon the best presently available information; it would bring up to date even those who had the benefit of a prolonged visit to the Laboratory. I know that Dr. Manley will be glad to discuss with you many of the specific questions that would naturally fall within the scope of such an informal interim report. We know too that September may not appear to be a desirable time to make such a report: new calculations will be in progress, many questions will still be quite unanswered, and the Laboratory program may still be in flux. Revertheless, we believe that the progress and clarification already achieved are so important to sound overall planning and evaluation that we feel it proper to press you to accede.

It would also be helpful to have a brief synopsis of the many improvements that have been contemplated and studied in the design of fission weapons. We have learned with great interest of what can in all probability be achieved by improvements in the implosion system, by new types of initiation, such as the external initiator, and by increasing the amount of active material in the weapon. The view of the Laboratory with regard to these developments could be most helpful to us, and, we trust, to the whole effort in the field of atomic weapons.

Very sincerely,

J. R. Oppenheimer Chairman

1A - N. E. Bradbury

2A - G. E. Dean

3A - A. Tomei

4A - J. H. Manley

5A - J. R. Oppenheimer

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