

CAUTION

pla document contains in from a affection the lational Delense of its from the first contains in the first contains in manner soon of the contains in manner soon of the first permitted of manner soul; it is soon of the permitted of manner soul; it is soon of the first penalties under the penalties under t

October

402535

Copy 5 of 5
copy letter of
Page
RICTED DATA
CONTENTS restricted data as
TONES

JONES

June 9, 1949

Mr. Bussell H. Ball, Chief Research Service Branch Atomic Energy Commission Berkeley, California

Dear Mr. Ball:

BEST COPY AVAILABLE

In response to your letter of May 31 regarding field experimentation in biology and medicine during proof tests of atomic weapons, we will desire to conduct certain investigations; the exact nature of some of these studies cannot be predicted so far in advance. The following specific items are noted:

- i. Studies are now being made of the nature of protection incurred by estrone administration against whole body radiation death. Current studies involve variations of estrone desages and of radiation exposure and intensity. The mechanism of the protection may be considerably worked out by 1951, and if so, there will be protection schemes which should be tested in the radiation area of an M-bemb detonation. Even at this time it would be helpful to know the relative protection given by estrone under these field conditions.
 - 2. Search is being made to find a possible substance responsible for the indirect effect of radiation on nucleic acid metabolism. Assuming that this problem matures, we will want to identify and assay such substances from both irradiated animals.
 - 3. General development of problems will take place over the next two years which cannot be predicted at this time.
 - A. We estimate that it would be advantageous to our research program to have a) two to four men in the experimental field area, b) laboratory space (150 square feet if possible, and c) facilities permitting the care, transportation and/or provision of 1000 to 2000 mide and rate.
 - 5. Some of the following members of the staff possibly may wish to be present, and know of the availability of the experimental tests: J. H. Lawrence, R. L. Dobson, H. Pace, C. A. Tobias, H. B. Jones, and Hm. Siri.

Very truly yours,

Hardin B. John

Wit to the