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CENTRAL FILES NUMBER
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Date July 13, 1948

Subject Sources for Grid Experiment

By J. H. Roberson

To K. Z. Morgan

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TO LOCATION E.L. Morgan

DATE July 13, 1948 48-7-159

ANSWERING LETTER DATE

ATTENTION

COPY TO J.H. Roberson
R.R. Coveyou

SUBJECT Sources For Grid Experiment

CLASSIFICATION CANCELLED
DATE 8/28/67
For The Atomic Energy Commission
H. R. Carroll
Chief, Declassification Branch

Conversation with D. Ramsey, Operating Department, developed the following information with regard to Ta sources for one grid experiment. Each source will consist of a 1 gm cylinder of Ta, encased in a shield consisting of a 1/8" steel pipe, with one end having a welded flat plate attached, the other end crimped. The sources will be bombarded in a region of the pile within which fluxes vary not more than 4%. Variations in weight of sources should be not more than 9%. Local variations in flux may bring total variation of activity up to about 20%. Since ~1200 sources are being prepared, electroscope screening of sources will (or can) assure much closer limits of activity per source.

Dr. Roberson has specified that the radiation intensity at the centre of a centre square of a lattice be about 10 mr/hr. The sources are to be placed about 25 ~~meters~~ yards JHR apart. It seems that the sources of about 200 mr each, as advertised by Ramsey, will fulfill this requirement reasonably well, though they might not give quite this much radiation at the "dead spots" in the lattice.

Original Signed By
J.H. Roberson

RRCoveyou:rr

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