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UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY WASHINGTON

OFFICE OF THE DEPUTY DIRECTOR

October 19, 1979

MEMORANDUM

TO:

Ambassador Henry Owen

FROM:

Spurgeon M. Keeny, Jr. Ark

SUBJECT:

Transmittal of Letter from Richard Garwin

Attached for your information is a copy of a letter I received today from Dr. Richard Garwin concerning the Agnew/Garwin/Lukasik report to which reference was made at our last meeting last Thursday on the South Atlantic problem.

For the technical reasons outlined in the attached letter, I continue to believe that there is merit in a more detailed review of the technical data in question by a group of senior scientists of the type suggested by Garwin.

Attachment:

Garwin Ltr dtd 10/18/79

cc: Amb. Gerard Smith

Mr. T. Pickering

Mr. Bruce Clark

Mr. John Deutsch

Ms. Lynn Davis

10/19/85

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Richard L. Garwin
IBM Thomas J. Watson Research Center
P.O. Box 218
Yorktown Heights, NY 10598
(914) 945-2555

october 18, 1979

Dr. Harold M. Agnew President General Atomic Company P.O. Box 81608 San Diego, CA 92138 Dr. Stephen J. Lukasik Chief Scientist Federal Communications Commission Washington, DC 20554

Dear Harold and Steve,

Questions from interested people in the Washington community who have read our report of 10/09/79 have caused me to think further about this matter. I have arrived at two conclusions, the second both more interesting and operationally more concrete than the first. You will remember that our report says that the data "...are consistent with...," and later that the data "...give assurance..."

- 1. Without attempting to justify the particular choice of words, on the basis of the information which we obtained and the analysis we were able to do, I would bet 2 to 1 in favor of the hypothesis. This assertion includes my estimate of the a priori probability of the event and also an estimate of the likelihood that the data are produced by another phenomenon or combination of phenomena. These betting odds would be changed by a change in either assessment.
- 2. We advocated the acquisition of more information, at considerable implied cost. I continue to support this judgement. What we did not say in our brief report (and which is obviously compatible with and implied by our recommendation to spend more money to obtain more information) is that it would be well worthwhile to take somewhat longer, with a perhaps larger group of technical experts, to focus in particular on the possibility that a combination of real phenomena could have produced the data presented to us. I would not make this recommendation if I did not have in mind an approach to the quantitative calculation of the likelihood of such an accidental coincidence. It would involve going back to the primary data, day by day, and not particularly at the time in question, to determine the rate of individual events which could mimic the components of the data which we saw.

Various outcomes are possible -- we might find enough such

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events to provide an accidental coincidence once per year, once in ten years, or once in ten thousand years. We might also be unable to find <u>any</u> of these "singles," so that we would be unable to estimate (but could still set an upper limit to) the accidental coincidence rate.

All the above says that there should be another one-or two-day meeting of a group of skeptical critical experts to review the "singles" occurrences in order to estimate the probability of accidental occurrence of the data as presented to us.

I would be willing to serve, and I believe it will be useful to add other people used to evaluating anomalies—Panofsky, Richard Muller, Luis Alvarez, Burt Richter, all of whom have adequate clearance.

I rely on S.M. Keeny to distribute this letter to those who received our original report.

Sincerely yours,

Richard L. Garwin

cc:

S.M. Keeny, ACDA

RLG: fdc: 291+HMA: 101879. HMA

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