

To Dr. Pattenqill

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Merril Eisenbud Sc.D.
711 Bayberry Drive
Chapel Hill, N.C. 27514
FAX/TEL (919)967-4561

February 28 1994

Representative George Miller
Chairman
Committee on Natural Resources
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Miller:

I appreciated the opportunity you gave me to appear at the hearing you conducted on the legacy of the nuclear testing program in the Marshall Islands. As I testified, it is significant that in the forty years that have passed since that tragic event occurred, this was the first time I have been asked to record my knowledge of the matter, despite the central role played by the laboratory I directed. Many of the unusual circumstances surrounding the BRAVO fallout, as known to me, are described in my autobiography, *An Environmental Odyssey*, to which several references were made during the hearing.

I found myself in disagreement with much of the anecdotal information presented by others concerning the allegation that heavy fallout must have occurred far beyond the islands that have traditionally believed to have been affected. As I testified, the AEC Health and Safety Laboratory (HASL), of which I was then director, undertook extensive aerial surveys of the islands of the Central and Western Pacific, and our findings are a matter of record. My own participation in those surveys was limited to the D+1 day over-flights of the islands downwind of MIKE, and the D+6 day over-flights of the islands north of Guam in the far Western Pacific. Other associates, the late Dr. John Harley, Mr. Mel Cassidy, and Mr. Alfred Breslin made similar flights over islands.

A copy of my field notes from October 30 1952 until I left the islands on November 7 is attached to this letter. Note that I surveyed 20 islands from a height

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of 200 feet. The ground level dose rates were all found to be less than 0.3 mr/hr on BRAVO + 1 Day. Of the 13 islands surveyed by Mr. Cassidy on the same day, the highest reading was 0.5 mr/hr. Breslin reported negative findings. I do not have any recollection of the manner in which his flight was vectored, but that should be a matter of record.

Somewhere there must be a compilation of the data obtained on these over flights for subsequent tests. Thus there need be speculation as to the extent of the fallout on the Islands of the Pacific, starting with the MIKE test on November 1 1952.

Note that, early on my flight of November 2, I found no fallout on Ujelang at 0845 local time. I don't remember the meaning of "passed word to LST", but it can only mean that it was the boat on which the Ujelang inhabitants had been evacuated, and that I was asked to report to the LST that conditions were safe for their return. This is in contrast to the testimony of The Honorable Ismael John that everything was covered by fine dust, and that the inhabitants suffered from radiation effects. Incidentally, I am quite certain that HASL had located monitoring equipment on Ujelang, which would have required that the island be visited every few days for servicing purposes.

As I said at the hearing, it is unlikely that any undisclosed information exists that will affect our understanding of the extent of the BRAVO fallout. However, after forty years, such documentation that does exist may be hard to retrieve except by a lot of searching at HASL (now EML), CINCPAC headquarters, and the files of the former AEC Division of Biology and Medicine to which HASL then reported.

There are a considerable number of unanswered questions concerning the events prior to and subsequent to BRAVO. I think these questions should be answered for historical purposes, and I have been greatly impressed with the diligence with which Ms. Linda Chase has attempted to locate important relevant documents. If I can be of any assistance in this regard I hope you will call on me.

Cordially

cc: Dr. Steven L. Simon
Dr. Harry J. Pettengill ✓
Ms. Linda Chase

5001820

D+1

Water meter (air)

ground meter

✓ Arlington Bridge road

✓ Rangeside

✓ Range side Backyard

✓ Bibar

✓ Taka

✓ Utirik

✓ Mejit

✓ Ailruk

✓ Juma

✓ Likiep

✓ Bikini

✓ Woto

✓ Jara

✓ Kuray

✓ Erom Cassidy - Flight Barber

✓ Nauru - Neg

✓ Ailinglapalap - neg

✓ Norman R. D. Neg

✓ Ebon - Neg

✓ K. D. - Neg

✓ Alant - Neg

✓ M. L. - Neg

✓ K. D. - Neg

✓ Malinao - Neg

✓ Malakal - Neg

✓ Eniwetok - Neg

✓ W. B. - Neg

✓ Area 2 - 12 5

2200 - Hardy 030303Z

Urom via 022000Z 105 month/2d

sample in Easy 012045Z to 020815Z

negative ~~was~~ kept at 021115Z

Dog and Fox 0302200Z

2330 Burton

Negative 030700Z

Hardy orbit Fox Fairpark and
George to Koror

TF011029Z

18 80 58

2 1515C 1914C 1915C

3 1714D 2216Z 9/14Z

4 24193 2410Z 10/17Z

Noted on 4

Ground up appearance Sunday

reappearance

① To 15 up admin reportable

② Hardy ground appearance

③ Geopac ground report

ground appearance

reportable

reportable

