Dear Sir:

With reference to phone conversation today between Lt Col Lulejian of this Division and Dr. Dunning of your Office, the inclosed chart is forwarded. (UNCLD)

This chart represents the fall-out from the first shot of CASTLE (U) Test Operation. If ground zero of Bikini Atoll is superimposed upon the city of Washington, and if the downwind direction is northeasterly, then the 1000 roentgen infinity isodose line will cover Washington, Baltimore, Philadelphia and a part of New York City. In the event that the dose rate at time of fall-out is desired, the time of fall-out over different areas is listed below:

- Washington, D.C.: 1/4 to 3/4 hour
- Baltimore: 3/4 to 1 1/2 hours
- Philadelphia: 5 to 7 hours
- New York City: 9 to 11 hours
- Boston: 12 to 14 hours. (S~)

It is assumed that the area covered by the fall-out within the 1000 roentgen infinity isodose line is approximately 6000 square miles. DELI

The inclosed chart superimposed on North Eastern United States will be published as Figure 4 of a report by Lt Col Lulejian of this Headquarter in the near future upon approval of Hq USAF. In the event that subject report is approved, your Office will be on the distribution list. If we can be of further service in this matter, do not hesitate to call upon us. (UNCLD)
HQ ARDC, RDTDA, non ccl ltr to USAEC

Letter classified SECRET in accordance with paragraph 23b, AFR 205-1.

Sincerely,

[Signature]

Robert H. Isbell
Colonel USAF
Chief, Atomic Operations Division
Deputy Commander/Technical Operations

1 Incl:
Chart-Castle Shot 1