

2:30 pm Tuesday

NUCLEAR SCIENCE SERVICE
2500 WISCONSIN AVENUE, N. W.
WASHINGTON 7, D. C.

February 1, 1954

Dr. Leo Szilard
Brandeis University
Waltham, Mass.

Dear Dr. Szilard:

You may have seen the Collier's article on secrecy that I did two years ago. I've been much impressed with the need for doing something additional by way of a national publication to bring home to the American people the essential silliness and, in fact, delusion of our present policy on secrecy.

I want to do another article this time either for the Post or for Harper's. To make it very graphic I would like to build part of the article about you--you being the person who originally had most to do with the genesis of atomic secrecy. It occurs to me that your views would be of interest to a large reading audience.

I'm going to be up in the vicinity of Boston Feb. 10th and 11th on a lecture tour. I could see you Wednesday afternoon or Thursday morning or if neither date were convenient I could hold over and see you Friday. Naturally I would like to fit in with your schedule.

I'm also anxious to talk over plans for an issue of the Bulletin of the Atomic Scientists. It will be a great pleasure and a privilege to see you again.

Sincerely yours,



RALPH E. LAPP

REL:jfd

NUCLEAR SCIENCE SERVICE

2500 WISCONSIN AVENUE, N. W.

WASHINGTON 7, D. C.

February 19, 1954

Dr. Leo Szilard
International Latex Corp.
Empire State Building
New York City

Dear Leo:

It was good of you to spend so much time with me last week. I am fascinated by your first hand account of the origins of atomic secrecy. I am returning with this letter the copy of the French correspondence.

I hope that I will be able to see you again and continue pulling together some of the very loose threads of the atomic bomb story. It is wonderful that you have kept such fine records of what is now the nearly ancient history of the project and it is most encouraging that you are planning to do a book. I just hope that you will not postpone completing the book for I believe that it will be a very fine edition.

Sincerely yours,



RALPH E. LAPP

REL:jfd

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9-1 pm

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EUGENE RABINOWITCH
Editor

February 17, 1955

Dr. Leo Szilard
420 West 116th Street
New York 27, New York

Dear Leo:


I have been knocking around the country for two months now but will be returning to Washington on March 6 and will then have some time for myself. Since we talked in New York almost everything we discussed has been more or less authenticated by the release on fall-out which the AEC made a few days ago.

All of this now highlights a new and radically different situation in the Atomic Weapons fields. To my mind, we now face a situation as different from the past as we did back in 1945. I would much appreciate the opportunity to discuss a number of Bulletin matters with you in New York at your convenience. Furthermore, I would like, if agreeable, to introduce you to a prominent Chicago businessman, Mr. William Swartz, who is taking active interest and furnishing generous support to the Bulletin. Would you have sometime around March 10 or perhaps the week after when we might meet for dinner in New York. I want to discuss specifically a special issue of the Bulletin which will concentrate on the theme, "Radiation and Man." I should warn you in advance that I would highly prize a contribution from you and will ask you for same but I do not know if spirit will move you towards such an effort.

I have read your letter of February 6 which we are pleased to reprint in the Bulletin. I am tremendously impressed with the condensed knowledge and wisdom you have packed into such a small space.

With best regards

Sincerely,



Ralph Lapp
4201 Massachusetts Avenue
Washington D.C.
Emerson 2 - 2351

King's Crown Hotel
420 West 116th Street
New York, New York

March 4, 1955

Mr. Ralph Lapp
4201 Massachusetts Avenue
Washington, D. C.

Dear Ralph:

Thanks for your letter of February 17th. I doubt that I want to write something on the topic of "Radiation and Man", but I shall be very happy to see you in New York. I expect to get back to the King's Crown Hotel around March 11th, and probably stay through the remainder of that week and the following week.

I expect to be in Chicago on March 8th and 9th, and if you want me to meet Mr. William Swartz, you could arrange that perhaps over the telephone. Mr. Swartz could reach me at the Quadrangle Club, Tuesday, March 8th, in the evening, or Wednesday, March 9th, in the morning - telephone Hyde Park 38601.

With kind regards,

Sincerely,

Leo Szilard

NUCLEAR SCIENCE SERVICE

ARLINGTON TOWERS M-707
ARLINGTON 9, VIRGINIA

5 May 1955

Dear Szilard,

I've looked into the $t^{-1.2}$ law and can report as follows: the original K. Way and E.P. Wigner paper in the Phys. Rev. gives a good fit to the $t^{-1.2}$ law over the period of one year (1948 reference).

Since that date the Naval Radiological Defense Laboratory has made extensive measurements on the 1946-Bikini contamination of ships and equipment. In addition, they have sprayed roads, fields, et cet with gross fp and have worked on decontamination. On 25 November 1953 the NRDL published "Radiological Recovery of Fixed Military Installations" which although it was based on A-bombs just happens to apply to the 1954 tests. It assumes 1,000 to 10,000 r/hr at 1 hr, thus covering the range of intensities found in fall-out.

H.F. Hunter and N.E. Ballou worked for NRDL and published their analysis of "Fission Product Decay Rates" in Nucleonics November 1951, page C-2. They conclude:

$t^{-1.11}$ for 30 m to 1 d
 $t^{-1.25}$ for 1 day to 4 day
 $t^{-1.03}$ for 4 d to 100 d
 $t^{-1.60}$ for 100 d to 3 yr

For the period from 3 ^{han} to 100 days (of most concern to us) the fit to the Wigner estimate is not bad. In fact, NDRL has published a table of roentgen doses for a 1000 r/hr at 1 hr contamination which agrees with my estimates. Example: NDRL says 639 r in period 24 hrs to 96 hr. My estimate is 650 r.

When one gets out on the tail end of the curve, as one does in global contamination studies, then it is important to take the $t^{-1.60}$ law into account. Moreover, out at the tail the gamma emission drops off. Prominent long-lived high-yield fp are often pure beta-emitters.

I saw Joe Volpe (former general counsel to AEC for 5 years). It would be good for you to meet him next time you are in town.

With best regards,

Ralph
R.E.L.

R. E. Lapp
1315 Park Terrace Drive
Alexandria, Virginia

~~No file~~
file addresses

26 March 1963

Dear Szilard:

In cleaning up my desk prior to leaving tomorrow morning I can across the enclosed memo (to myself) on global fallout. It is three years old and may require some revision but I think it still holds up.

I believe that you are really interested in the "once around" fallout and not in local fall-out. Thus the enclosure applies. It is possible that some wind patterns return debris from local fallout to parts of Europe if western Russia is targeted. Some competent meteorologist like James MacDonald of the University of Arizona might be intrigued with this problem.

For some time I have been wondering about the technical sources available to Senator Dodd and Congressmen like Hosmer. It seems to me that the publication of Stefan Possony's "Eleven Chapters" in the Congressional Record (March 21, page 4358 ff) reveals how poorly informed some of these men must be. The arguments on the neutron bomb are so confused as to lead to a single conclusion: Possony must be a real nut. This confirms personal observation.

Sincerely,

R. E. Lapp

R. E. Lapp

*Memo returned Mar 26/63
JL*