MEMO TO FILE

FROM: H. S. Lowenhaupt

SUBJECT: France’s Atomic Energy Development, as Extracted from Joliot-Curie’s Speech to the Committee on Atomic Energy, 19 March 1946.

1. Between December, 1944 and July, 1945, after the return of Pierre Auger and Francis Perrin, Joliot had official interviews with Sir John Anderson concerning atomic energy in France. General de Gaulle was informed of the state of affairs at the end of 1944. With the aid of Mr. Dautry and the six members of the present Commission, plans for ordinances and decrees instituting the Atomic Energy Commission were presented to General de Gaulle who accepted them. The ordinances were published in the official newspaper just prior to the elections of October, 1945. The decrees of nomination of members of the Commission were published in January, 1946.

2. Joliot-Curie expected the experiences of Magure, Kowarski, Gueron, Goldschmidt and Auger would enable France to avoid many long and tedious experiments.

3. France has available a supply of uranium built up before June, 1940; deposits of uranium throughout the empire sufficient for the first stage of work; and, finally, great hopes for the discovery of new deposits.

4. France has a priority in Norway concerning the ordering of heavy water.

5. Concerning atomic energy development in Russia, the French know practically nothing. Joliot doubts whether atomic research in Russia was very far advanced by March, 1946, but he expected that Russia would begin to catch up in two or three years (elsewhere Joliot commented on the great productivity of Soviet research workers in spite of a lack of modern, scientific material in their laboratories).

6. Joliot expressed the point of view that France could probably get the small nations of Europe to join her in the development of atomic energy. He also felt that through close cooperation with England that England could be aided in getting “out of the grasp of the United States.”

7. Joliot implies that deposits of uranium and thorium are to be found in “certain French colonies.”

8. Mechanical and radio-electric departments and storage buildings have been placed at the disposal of the Commission in the Fort of Chantillon by the Army.
9. Treatment of minerals and preparation of materials of extreme purity are to be carried out in the powder mill of Bouchet and in industry. Joliot wishes to construct a center for research in pure and applied nuclear physics situated in the vicinity of Paris, and to install a cyclotron; a betatron; and two experimental uranium piles, one of several hundred kilowatts using heavy water, and the other of several thousand kilowatts using graphite cooled by air.

10. There is also projected the construction of a very powerful pile of approximately one hundred thousand kilowatts in a suitable region in France where there is sufficient water of high purity. The last installation cannot be expected until after considerable prospecting, exploiting, and treating of considerable raw materials has been done.

11. Joliot also states that: "It must be mentioned that our efforts will be followed with the greatest of attention by the other countries and that before all international agreements, great care should be taken in divulging the results which we shall obtain. There are so many ways of exerting pressure on a country from the outside."

H. S. LOWENSHAUP

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