MEMBER OF THE INTERIM COMMITTEE MEETING
FRIDAY, 1 JUNE 1944
11:00 A.M. - 12:30 P.M.; 1:45 P.M. - 3:15 P.M.

PRESENT:

Members of the Committee
Secretary Henry L. Stimson, Chairman
Hon. Ralph A. Bard
Dr. Vannevar Bush
Hon. James F. Byrnes
Hon. William L. Clayton
Dr. Karl T. Compton
Mr. James B. Comant
Mr. George L. Harrison

Invited Industrialists
Mr. George M. Buehrer, President of Westinghouse - manufacture of equipment for the electromagnetic process.

Mr. Walter S. Carpenter, President of Du Pont Company - construction of the Hanford Project.

Mr. James Banti, Vice President of Union Carbide - construction and operation of gas diffusion plant in Clinton.

Mr. James White, President of Tennessee Eastman - production of basic chemicals and construction of the ANX plant at Holton, Tennessee.

By invitation
General George C. Marshall
Major Gen. Leslie H. Groves
Mr. Horace D. Bundy
Mr. Arthur Page
1. OPENING STATEMENT OF THE CHAIRMAN:

In opening the meeting Secretary Stimson praised the unique contribution of American industry in the prosecution of the war. He expressed his thanks to the industrialists present for their special contributions and for their coming to meet with the Committee to offer the benefit of their views.

The Secretary introduced the members of the Committee and explained that it had been established by him with the approval of the President in order to assist the Secretary and General Marshall in making recommendations to the President concerning control of this weapon during the war period and organization for post-war control.

The Secretary assured the group that both General Marshall and he were fully cognizant of the implications of our discoveries in the field of nuclear energy. They realized that its potentialities extended far beyond the immediate military uses which, of necessity in war time were their first concern. This development held tremendous potentialities for the welfare of mankind and any consideration directed toward control of the field had to take these implications into account.

The Secretary expressed the hope that the industrialists present might offer suggestions with regard to the problem of international relations. He pointed out that a most important factor in making decisions concerning the problem of international cooperation...
was the question of how long it would take other nations to catch up with the United States. Accordingly, the Secretary was anxious to secure their estimates on this time factor.

II. COMPETITIVE LAG:

Mr. Carpenter pointed out that it had taken his company twenty-seven months to complete the Hanford project from the date of receipt of the basic plans. In carrying forward the job of industrial design, construction and actual operation, the Du Pont Company enlisted the assistance of from 10,000 to 15,000 other concerns. By being able to call on these other concerns for assistance the Du Pont Company was able to complete construction much more quickly than would otherwise have been the case. He estimated that it would take Russia at least four or five years to construct this type of plant even assuming that they had the basic plans. Russia's greatest difficulty would be in securing the necessary technicians and adequate production facilities. If Russia were able to secure the services of a large number of German scientists — I. G. Farbenindustrie or Siemens — they would be able to proceed much more rapidly.

Mr. White, whose primary concern in the program has been the operation of the T-22 electro-magnetic plant, discussed the great complexity of equipment required in production. He stressed the advantage held by the United States in standardized mass production. Special ceramics, a great number of vacuum tubes,
special stainless steels, and a great variety of special products were needed in his plant, and he doubted whether Russia would be able to secure sufficient precision in its equipment to make this operation possible. Mr. White stated that in his operation that they were using more than 2,000 college graduates and nearly 1,500 men of approximate college level, and more than 5,000 skilled workers. In many cases it had been necessary to establish special training schools to train the personnel in the operation of special equipment. With regard to Russia's potentialities he felt that one of the greatest problems would be to secure the necessary large number of skilled workmen and technicians at the college level.

In this connection Mr. Clayton expressed the view that we would have to assume that Russia would probably have access to German resources, scientists, and technicians.

Mr. Bucher estimated that if Russia had the services of the technicians and scientists of Siemens and I. G. Farbenindustrie she might be able to produce a sample of the electro-magnetic plant in approximately nine months, but that it would take a total of three years to get into operation. He pointed out that major problems in this type of operation were replacement parts and extremely accurate precision tools. He estimated that Germany, on the assumption of their having the basic information, would require from 15 to 18 months to arrive at the production stage; Italy (Fiat) 15 to 18 months; and England possibly one year.
The meeting recessed for luncheon at 12:30
and resumed at 1:45 P.M.

III. POST-WAR ORGANIZATION - VIEWS OF THE INDUSTRIALISTS:

Mr. Byrnes asked the group for their views concerning
the type of organization that should be established after the
war to carry on the program. In supplementing this question,
Dr. Karl T. Compton pointed out that a very real problem was
how best to organize so as to realize all the potentialities of
the field with due regard for the industrial aspects.

Mr. Fahey thought that the present partnership of
industry, universities, and Government should be continued.

Mr. Bucher recommended that the present organization
be kept in being for at least another year. He stressed the
need for more fundamental research with some provision whereby
the results of such research, particularly with regard to power,
could be made available to industry. In this connection, Dr.
Karl T. Compton suggested that it would be desirable for particular
companies to retain a nucleus of research people to evaluate the
potentialities in this field as they were uncovered by government-
ponsored fundamental research.

Mr. Garwood pointed out that industrial participation
in this endeavor had been, and probably would continue to be, at
the operating level. He stressed the need for a great deal more
fundamental research. Industry was not in a position to conduct research on an adequate scale; therefore, the government should assume responsibility for fundamental research with adequate provision for the encouragement of practical research in industry. He was deeply convinced that the all-encompassing nature of this development was so vast that it could not be left to industry. In the national interest it was imperative that the government assume the preponderant role. He held that it was necessary not only for the government to sponsor and control a large-scale program of fundamental research but also that it assume responsibility for securing controlling supplies of uranium. He recommended the following program:

1. Accumulate a stock pile of bombs.
2. Put the plants in a stand-by status.
3. Concentrate on fundamental research.
4. Secure controlling supplies of uranium.

With regard to 2 above, Dr. Bush pointed out that it would be necessary to continue some production of material for use in fundamental research and that access to operating plants would be necessary for the carrying on of certain experiments.

As the representatives of industry were leaving the meeting, Mr. Carpenter expressed on behalf of the industrial group very great appreciation for the excellent job done by General Crown.
in carrying the current program forward.

The Committee reassembled at 2:35 P.M. in

Mr. Harrison's office.

IV. POST-WAR ORGANIZATION - COMMITTEE DISCUSSION:

Dr. Compton reported that the four scientists had com-
pleted their memorandum on post-war organization and were sub-
mitting it to the Secretary of War through Mr. Harrison. Dr.
Compton stressed the great complexity of this problem and the
need for securing as members of the board of directors men of the
highest competence and wisdom.

Dr. Bush stated that the organization proposed by the
four scientists need not be concerned at this time with the problem
of an over-all post-war research organization for national security.
He said that one of the problems with which the board of directors
would have to concern itself was the question of the allocation
of material, such as loans to universities and other research groups.
He pointed out that the universities not only would want access to
certain quantities of material for research purposes, but also access
to pilot plants.

Dr. Compton expressed the conviction, which was agreed
to by Dr. Compton, that the Interim Committee was not competent to
decide upon these detailed questions, but rather that it was responsible
for recommendations leading to the establishment of a permanent organi-
ation which would be competent to deal with these questions.

It was agreed that the organization paper from the scientists, when received, should be considered a basis for the drafting of the necessary legislation.

V. CURRENT APPROPRIATIONS:

General Groves reported that current appropriations for the project would run through June of 1946. Mr. Byrnes pointed out, however, that in the event that the war ended before the end of June 1946 Congress would be disposed to cancel all outstanding authorizations. In this event the Committee would be faced with the immediate problem of taking up with Congress the question of continuing appropriations and in so doing it would be necessary to furnish an estimate of the costs involved.

General Groves reported that the five Congressmen whom he recently took on a visit to the project in Tennessee were very much impressed with the plant and appeared to be most appreciative of the magnitude and national importance of the program.

VI. USE OF THE BOAT:

Mr. Byrnes recommended, and the Committee agreed, that the Secretary of War should be advised that, while recognizing that the final selection of the target was essentially a military decision, the present view of the Committee was that the boat should be used against Japan as soon as possible; that it be used on a war plant
surrounded by workers' homes; and that it be used without prior
warning. It was the understanding of the Committee that the
small bomb would be used in the test and that the large bomb (gun
mechanism) would be used in the first strike over Japan.

VII. PUBLICITY:

Mr. Harrison pointed out that the discussions and
tentative conclusions of yesterday's meeting had already rendered
obsolete the draft Presidential statement prepared by Arthur Page.
In the past few days the Secretary had held discussions with
Generals Marshall and Arnold concerning targets and would probably
discuss this question further with Admiral King and General Marshall.
This Committee was not considered competent to make a final decision
on the matter of targets, this being a military decision. Accordingly,
Mr. Harrison suggested that he be empowered by the Committee to confer
with those members of the Committee who would be available at the
situation with regard to targets developed and to have prepared
new draft statements for the consideration of the full Committee
at its next meeting.

VIII. LEGISLATION:

Mr. Harrison urged that prompt consideration be given to
the problem of drafting the necessary legislation. It was suggested
that the memorandum of the four scientists could be used as a basis
for the draft. The Committee agreed that Mr. Harrison should proceed,
with the assistance of those members of the Committee who were available, with the preparation of an outline of major points to be included in a bill for study by the Committee at its next meeting.

IX. NEXT MEETING:

It was agreed that the next meeting should be held at 9:30 A.M. Thursday, 21 June 1945, the place of meeting depending upon the schedule of the Secretary of War.

It was agreed that the Committee should consider organization proposals and the requirements for legislation. The Committee would also consider at that time the situation with regard to publicity.

The meeting was adjourned at 3:30 P.M.

R. Gaskin Arneson

R. GORDON ARNESON
1st Lieutenant, A.U.S.
Secretary