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Ostober 21, 1957

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MACMILLAN TALKS. WASHINGTON October 23-25, 1957

Increasing Availability of Muclear Technology. Mrterials, and Veapons

The attached position paper was drafted by S/AE - Mr. Farley, and cleared by S/P - Mr. Smith, EUR/RA - Mr. Timmons and BNA - Mr. Dale.

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OCT 2 3 1957

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MACMILLAN TALKS, WASHINGTON

October 23-25, 1957

Increasing Availability of Nuclear Technology, Materials, and Weapons

(To be raised at U.S. initiative)

Anticipated British Position

A. U.S.-U.K. Relations

Present restrictions on U.S.-U.K. atomic energy cooperation, arising mainly from U.S. statutory limitations, impose on the U.K. the burden of duplicating U.S. weapons development and testing and prevent the efficient use of the scientists, materials, and industrial resources of the two countries for their common national security objectives. They also hamper military operational arrangements for use of nuclear weapons in event of war. Fuller cooperation would improve the defense posture of both the U.S. and U.K. and would enable them to contribute more effectively to the military strength of the alliances of which they are both members. The limited U.S.-U.K. atomic weapons cooperation is inconsistent with the importance of nuclear weapons to our mutual defense, and with the close relations in other aspects of the U.S.-U.K. alliance.

B. Relations with Other Allies

Expansion of cooperation with third countries and with NATO in furnishing nuclear information, materials, and weapons should also be examined.

Recommended U.S. Position

A. U.S.-U.K. Relations

We intend to seek modification of present U.S. statutory restrictions on atomic energy cooperation. Studies are underway to determine what revisions in the Atomic Energy Act of 195h should be recommended to the next session of the U.S. Congress.

In conjunction with U.S. study of possible revision of the Atomic Energy Act, the U.S. would welcome discussions with appropriate U.K. officials to identify the military and technical areas in which greater cooperation might be achieved, and the advantages which the two nations would gain thereby.

In the period before the Act can be amended, the U.S. will also explore with the U.K. any steps which can be taken to improve existing cooperation (e.g., supply of enriched uranium for U.K. power reactors, sale of submarine propulsion reactors if desired.)

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B. Relations with Other Allies

- 1. As for Canada, the U.S. will be prepared to cooperate with Canada in all areas of U.S. J.K. atomic energy collaboration.
- 2. As for the availability of nuclear weapons for NATO, the U.S. expects, at the December NATO meeting, to propose arrangements for a NATO stockpile of nuclear weapons. Nuclear weapons would be stored as required by NATO plans but in U.S. custody. The U.S. hopes that the U.K. will support the proposed NATO stockpile, and that the U.K. will agree that arrangements for provision of U.S. warheads for U.K. Corporal missiles in Germany should conform with this concept. (Even if the Atomic Energy Act is amended to permit peace-time transfer of custody, it may be desirable to retain U.S. custody of nuclear weapons made available for NATO delivery. U.S. custody would provide one means of insuring that use of U.S. supplied nuclear weapons would be restricted to support of NATO plans and objectives. It would also avoid a difficult financial problem of payment for U.S. weapons.)
- 3. As for training of NATO delivery forces, the U.S. would expect to take advantage of any liberalization of the weapons information provisions of the Atomic Energy Act to improve the training and operational readiness of NATO delivery units.
- h. As for nuclear propulsion, the U.S. would expect that advantage would be taken of any liberalization of the Atomic Energy Act to cooperate with interested and qualified NATO countries by provision of nuclear materials and technology for nuclear submarines.
- 5. As for production of nuclear weapons by other NATO countries, the U.S. believes that, on the principle of balanced forces and most efficient use of resources, nuclear weapons manufacture should not be undertaken except by the U.S. and the U.K. The U.S. would propose to continue the Bermuda understanding that the U.S. and the U.K. would consult regarding the proper course of action if approached by France or any other country for assistance in development of nuclear weapons.
- 6. With regard to the peaceful uses of atomic energy, the U.S. will continue to seek out means for improving cooperation among free world countries. The U.S. attaches particular importance to the economic and political benefits anticipated from Euratom and hopes that the U.K. like the U.S. will work closely with the Community of Six. For its part, the U.S. will consider what additional strengthening of its cooperation with the CEEC nuclear energy activities might aid NATO cohesion.

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Background

The recent evidences of Soviet technical and military strength have reemphasized the importance of marshalling our full power for the support of the Free World alliances. Atomic energy is the principal military strength of the Free World. By integrating atomic energy more fully into the texture of our alliances we can revitalize them and strengthen Free World unity and confidence.

Present U.S.-U.K. Cooperation

The Atomic Energy Act of 1954 as amended provides an adequate basis for atomic energy cooperation between the U.S. and U.K. in the peaceful uses of atomic energy. The Agreement for Cooperation in the Civil Uses of Atomic Energy negotiated in 1955 enables technical cooperation on both a classified and an unclassified basis. An amendment to this agreement in 1956 permits exchange of information regarding nuclear propulsion reactors, and also a specific exchange of atomic energy materials.

In the military field an agreement for cooperation was negotiated in 1955, limited pursuant to the Atomic Energy Act to information relating to the utilization of nuclear weapons. Information primarily relating to the design and fabrication of nuclear weapons is excluded except to the extent that unimportant information of this nature is involved in utilization.

The Act also prohibits supply of nuclear material to other countries for use in atomic weapons or for any other military purpose (e.g., submarine reactor fuel). The Act is interpreted to prohibit transfer of nuclear weapons to another country except under the President's emergency powers in event of hostilities.

Possible Steps Before Act is Amended

Some measures can be taken to improve U.S.-U.K. atomic energy collaboration within present U.S. legislation. There are no significant possibilities for expansion of existing scientific and technical cooperation in the none weapons field. The U.K. has approached the U.S. concerning the possibility of obtaining substantial amounts of enriched wranium for U.K. power reactors. Interest has also been indicated in the possibility of obtaining a submarine propulsion reactor. Greater latitude might be possible in administrative determinations of "unimportant" design and fabrication information transmissible to allies.

Possible Steps if Act is Amended

The important measures which could be taken if the Act were amended would include the following. No decisions have been reached regarding the necessary amendments, and no commitment on any of these measures can of course be given at this time.

- a. Supply of enriched wranium for U.K. propulsion reactors and weapons. The U.K. Is currently considering expansion of its present small-scale facilities for producing U-235, needed both for reactor fuel and for weapons. U.S. costs for producing enriched wranium are lower than U.K. costs, since U.S. large-scale gaseous diffusion facilities are highly efficient and U.S. electric power costs are much lower. By purchasing U-235 from the U.S., the U.K. would also save the large investment costs.
- b. Cooperation in nuclear weapons development and testing. No important information on the design and fabrication of U.S. nuclear weapons is transmitted to the U.K. The U.K. must thus at great cost in money and scientists repeat the research and development work successfully conducted by the U.S., and the weapons which it currently can stockpile are believed to be less efficient and varied than those available to the U.S. Geoperation in development and testing (including possible joint use of Pacific Proving Grounds) of nuclear weapons would improve the efficiency and usefulness of the U.K. stockpile, expand the combined scientific capabilities of the U.S. and the U.K., and eliminate the expense of duplication of U.S. development and testing by the U.K. The U.S. should gain in the future from drawing on the U.K. pool of first-rate scientists. Recent progress in Soviet nuclear weapons development should reduce the weight to be given to any increased risk to security of sensitive U.S. data.

In addition, collaboration in anti-missiles defense, anti-submarine defense, and similar urgent areas cannot be effective unless nuclear weapons designs can be discussed, since nuclear weapons appear to be essential to achievement of effective defense systems against current and expected Soviet weapons.

- c. Improved training of U.K. forces in the delivery of U.S. weapons and warheads would be enabled by loosening or removing restrictions on the information concerning these weapons which can be made available.
- d. U.S. muclear weapons for delivery by U.K. forces must currently be stored in U.S. custody. Storage of these weapons in U.K. custody would improve the operational readiness and effectiveness of the U.K. forces. (Any decision to amend the Act to permit peacetime transfer of custody would require particularly close study in view of the interest of other U.S. allies in obtaining nuclear weapons for their use, and the necessity for effective arrangements to insure use of U.S. supplied nuclear weapons only for mutual defense objectives.)
- e. Appraisal of Soviet atomic energy capabilities would be improved by removal of restrictions on U.S.-U.K. joint evaluation of data relating to the USSR program.