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BACKGROUND OF FUCHS AS FURNISHED BY HIM (X) U

Emil Julius Klaus Fuchs stated that he was born on December 29, 1911, in Russelsheim, Germany. He said that his father's name was Emil, who is presently engaged in a teaching post at the University of Leipzig, Germany. His mother's name was Else Wagner Fuchs. She is now deceased. One sister named Elizabeth was married to an individual by the name of Kittowski, and she committed suicide in about 1938. Fuchs said that it had been reported that her husband, Klaus Kittowski was dead at one time, but that this report was not true, and that he had learned that this individual was presently in the Eastern zone of Germany and was an active Communist. Fuchs' only brother, Gerhard Fuchs, was, according to Fuchs, presently living in Davos, Switzerland, and was in a sanitarium there because of a tuberculous condition. (It might be noted at this point that according to Mr. Skardon, Gerhard Fuchs has left Davos, Switzerland, and is believed to be presently in Germany.) Fuchs said that he last saw his brother, Gerhard, in Switzerland in 1947, when he made a trip there in order to do some skiing. (X) U

Fuchs' other sister, Kristel Fuchs Heineman, is married to Robert Heineman, and Fuchs stated that he was aware that she was presently in the mental institution in Westboro, Massachusetts. Fuchs was unable to give, in any great deal, the background of his sister Kristel, and was unable to furnish the date of her marriage to Robert Heineman, but roughly calculated this date on the age of the Heinemans' eldest child. He stated that Kristel had come to the United States during the 1930's and had attended Swarthmore College, and he believed she had also attended Bryn Mawr. (X) U

It is to be noted at this point that Fuchs was questioned as to the Communist background and activities of his immediate family, and he declined to furnish any information at first with respect to this, stating that he did not see that it was pertinent to the purpose of the questioning. He was also asked as to whether his father, Emil Fuchs, a pastor, knew about his Communist activities in Germany, and whether his father was in sympathy with those activities. He replied that his father had believed in his children doing as they saw fit. Later, during the questioning of Fuchs, he stated that his sister, Kristel Heineman, had been active in under-ground work in Germany, but that he did not know if she had ever actually been a member of the Communist Party. In speaking of Robert Heineman, Fuchs stated that on one of his first visits to the Heineman home, probably at Christmas 1943, he gained the impression that Robert Heineman was a Communist, or at least was in favor of the Communist philosophy. (X) U

Fuchs stated that he was educated at the Universities of Leipzig, Kiel and Berlin, and had also attended Bristol University in England after his arrival there in the summer of 1933. In 1937, Fuchs took post-graduate work at the University of Edinburgh. He stated that his work under a research scholarship at the University of Edinburgh was interrupted by his internment as an alien in May of 1940. With respect to this internment, Fuchs said that in July, 1940, he was sent from England as an internee to Canada, arriving in Canada in July, 1940, and being interned first at Camp L, which is near Quebec. He was later moved to Camp N, which is near Montreal. Fuchs was returned from Canada in late 1940, and

was released in England in January, 1941. He then returned to the University of Edinburgh, and in May of 1941, he moved to Birmingham, England, where he began research work on the Atomic Energy project there under Professor Raddolph Peierls. Fuchs stated that he became a naturalized British citizen in May of 1949. (S) U

COMMUNIST AFFILIATIONS AND MOTIVATION (S) U

Fuchs stated that he joined the Communist Party of Germany while he was attending the University of Kiel. He said that while at the University of Kiel, he had been the head of a group of German Communist students, and he said that the Nazi students at the University of Kiel knew of his Communist work. He stated that in March of 1933, with the burning of the Reichstag, he realized that it would be necessary for him to stop his active Communist Party work, and he therefore went underground. He travelled to Berlin, and took up studies at the University of Berlin, but a short time later the authorities there learned of his Communist Party affiliations, apparently, according to Fuchs, from the Nazi students at Kiel; and he, therefore, was forced to leave the University as he was afraid he would be taken into custody. He thereafter, in the summer of 1933, went to France, and thereafter, in September, 1933, travelled to England. Fuchs said that while at the University of Bristol, he was active on a committee helping the Spanish Republican forces, and Fuchs said that he regarded this activity as work in behalf of the Communist Party. Fuchs also said that while he was in Bristol, he attended some meetings of the Society For Cultural Relations with the Union of Soviet Socialist Republics, and that he regarded this organization as being a Communist front group. He said that he was not actually a member of this society, but did go to many of the meetings. Fuchs stated that while he was at the University of Edinburgh, he organized the sending of propaganda leaflets from Scotland to Germany. He said that this was work in behalf of the German Communist Party. (S) U

Fuchs stated that during the period he was in England, from September, 1933 until some time in 1941, he was aware that there was operating in England an under-ground section of the German Communist Party. Fuchs said that he was considered to be a member of this section of the German Communist Party, and had probably filled out a biography concerning himself and furnished it to officials of the German Communist Party some time after his arrival in England, because of the fear of the Party that they might be infiltrated by Nazis. Fuchs also said that he was aware that Jurgen Kuczynski was regarded as the head of the under-ground section of the German Communist Party during this period. (S) U

Fuchs said that all of his espionage activities in behalf of the Soviet Union were motivated by his belief in the principles of Communism, and by the same desire which prompted his work in Germany in behalf of the Communist Party there. He said that at various times, he had had doubts concerning the position of the Soviet Union in world affairs, mentioning specifically the Russo-German Pact of 1939, but Fuchs said that he was always able to reconcile in his mind the position of the Soviet Union during the period of his espionage activity until he finally broke away from this activity in February or March, 1949. (S) U

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INITIAL ESPIONAGE ACTIVITIES OF FUCHS IN ENGLAND (S) U

Fuchs advised that in May, 1941, he accepted employment in Birmingham, England, as a scientist on work with relation to atomic energy research. He said that upon learning the nature of this work he decided to furnish information regarding it to the Soviet Union, and in order to carry out this plan late in the year 1941 he traveled from Birmingham, England, to London, where he made contact with Jurgen Kuczynski, whom he knew to be more or less of the leader of the underground German Communist Party in London. Fuchs stated that he previously had been in contact with Kuczynski and knew of his contacts in refugee circles, particularly with German Communists. On his first contact with Kuczynski, he informed him of his desire to furnish information to the Soviet Union, and Kuczynski made arrangements to have Fuchs recontact him a short time later. This Fuchs did, at which time Kuczynski had made arrangements for Fuchs to establish a clandestine contact with an individual whom Fuchs came to know under the name of Alexander. (It is to be noted that Fuchs has identified a photograph of this individual as Simon Davidovitch Bremer, who was, in 1942 and until some time in 1945, the secretary of the Military Attache's staff at the Soviet Embassy in London.) (S) U

Fuchs said that he maintained contact with Alexander for a period of approximately one-half year, and that he had only two, or possibly three, meetings with Alexander, one of which took place at the Soviet Embassy in London. At the last meeting Alexander told him that he was to have a new contact, and made arrangements for such a contact. Fuchs believes that Alexander may have mentioned that he was leaving England. During Fuchs' meetings with Alexander, which took place during 1942, he furnished to him written information concerning his work on atomic energy research, including papers which had been prepared by Fuchs in connection with this work. (S) U

Fuchs said that his second contact, which had been arranged by Alexander, was with a woman whom he met in Banbury, England. He said that he does not know this woman's name. (Mr. Skardon said that she has not been identified by the British investigation to date.) Fuchs remained in contact with this individual until he left England in November, 1943. He delivered to her, in the period from some time in the middle of 1942 until November, 1943, additional information regarding the work being carried out at Birmingham with relation to atomic energy. (S) U (U)

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Fuchs stated in answer to questioning that at no time did anyone ever try to recruit him into espionage work, that he sought out the contact on his own initiative, that he never attended any espionage school and he never received any instructions in espionage from anyone at any time, with the possible exception that in his earlier contacts with Alexander, Alexander suggested that he be careful to avoid being followed, that he should use taxicabs and double back in order to throw anyone off the track who might be following him, but he believed this to be too expensive and not so good a method in his own judgment. He preferred to go to a large place like some subway station in London where there was both a lift (elevator) and stairs, and to make contacts in such a place. A suggestion he received in quite general terms also was that when checking on surveillances or trying to ascertain if he was being followed that before looking back he should cross the street and he should go into a deserted place or building, from which point he would make observations to see if anyone might be following him. Fuchs also said that he did not know the identity of the Soviet Intelligence Service for which he was working, and in fact did not know that there was more than one branch of the Soviet Intelligence Service. (S)U

He stated that when he first made his contact on his own initiative in early 1942 in England, he made known his availability and readiness to furnish confidential information of a classified type, and also described his occupation which gave him access to classified materials relating to atomic energy research. He furnished information to his contact, Alexander, both orally and in writing concerning atomic energy research which he knew to be classified and confidential, and for the specific purpose of such information being furnished to the Soviet Union as an aid in promoting atomic energy research and development in and for the advantage of the Soviet Union. (S)U

[INSTRUCTIONS FOR CONTINUING HIS ESPIONAGE ACTIVITIES IN THE USA] (S)U

Fuchs stated that in the Summer of 1943 he learned that he was being designated as part of an official British Mission which was to travel to the United States to do work in connection with research on atomic energy. Fuchs said that the Soviet Intelligence Service had nothing to do with his being chosen as part of this British Mission, and that he was chosen because of his knowledge and qualifications as a nuclear scientist. Upon learning of his designation as part of the British Mission, he informed his woman contact of (S)U

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this fact and she subsequently gave him instructions as to how he was to establish contact in the United States. Her instructions were to the effect that Fuchs should, on a designated day and at a specified time, go to a point on the lower East Side of New York City where he would meet an individual who would be wearing gloves and would have an additional pair of gloves in his hands. Fuchs was to carry a tennis ball in his hand. Fuchs said that the instructions were to the effect that if contact was not established at the designated date, time and place, a second attempt should be made at a later time. Fuchs did not recall whether this was to be a week or a month later, but said that it was probably one or the other. Fuchs said that there were definite arrangements made as to the passwords which would be exchanged at the meeting, but that he does not now recall exactly what these instructions were, but he gave the following as an example of such instructions. The contact would state, "Can you tell me the way to Grand Central Station?" Fuchs would make a reply which would not be entirely responsive, and the contact would in turn make an absurd reply. Thereafter, the regular conversation between the two persons could begin. (S) U

He stated he made no written notes whatsoever as to the instructions received, but he did memorize them and retain them in his memory until the meeting was consummated. He advised that it was his intention and understanding that this meeting was for the purpose of establishing an espionage contact in the United States so that he could continue to furnish confidential, restricted information through this contact to and for the benefit of the Soviet Union. (S) U

FIRST CONTACT FOR ESPIONAGE PURPOSES IN USA (S) U

In keeping with prior instructions, Fuchs advised that he left with members of the British Mission by ship and came to the United States. He landed at Newport News, Virginia, on about December 3, 1943. He proceeded to Washington, D.C., and stayed in Washington at some hotel, the identity of which he does not remember, for one or perhaps two nights. Then he went to New York City. He took up residence promptly at the Taft Hotel. Most of the members of the British Mission were stationed at the Taft Hotel. He did not like the place himself, and soon thereafter he moved. At first it was his estimate that he might have spent the first month after his arrival at the Taft Hotel. Later he concluded this was too long a period, in his estimate. He next moved to the Barbizon Plaza Hotel in New York City. At first he estimated he might have lived there for two or three months before moving, but when it was shown that his next place of residence began on February 1st he agreed that this stay at the Barbizon Plaza Hotel was considerably shorter. (S) U

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Another member of the British Mission, Mr. Henry S. ~~Arms~~, left for England and he left a furnished apartment on West 77th Street, the exact address he confirmed as being 128 West 77th Street. This was a furnished apartment, and he remembers having seen the caretaker and his wife, but he cannot recall their identities. He does not believe they were colored and he states that his mind is a complete blank as far as their identities are concerned. (S) U

After arriving in New York City, Fuchs took up employment as part of the official British Mission which had its offices at 43 Exchange Place, New York City. Fuchs said that the British Mission was working with officials of the Kellogg Corporation which was under the control of the Manhattan Engineer District. Fuchs said that the work of the British Mission was with respect to developing the mathematical theory for the building of a chemical plant with regard to the gaseous diffusion process. Fuchs said that one of his immediate contacts in the Kellogg Corporation was Manson Benedict, and another individual was named Mentrose. Fuchs stated that at Christmas, 1943, he visited the home of his sister, Kristel Heineman, in Cambridge, Massachusetts. (S) U

He then told the story of his first meeting in substance as follows: (S) U

In keeping with the specific instructions which had been given to him by his woman espionage contact in or near Banbury, England, he proceeded at the time and on the date indicated to a place on the lower East Side of Manhattan, which he recalls to have been on Henry Street. It was not dark although it was approaching dark at the time, and his recollection was that this was about Christmas, 1943, or at least in December, 1943, or January, 1944. The place for the meeting had been selected by his woman contact near Banbury, England. He believes that it is possible he was living at the Barbizon Plaza Hotel at this time, because he recalls going into a subway station located near the Barbizon Plaza Hotel, and he entertained some apprehension, in fact, concerning this first meeting. He recalls having this apprehension while he was in the subway station near the Barbizon Plaza Hotel getting ready to proceed to his first contact. Since he moved from the Barbizon Plaza Hotel to 128 West 77th Street on February 1, 1944, or about that time, he assumes that logically the time of this first meeting was prior to February 1, 1944. (S) U

He asked no questions as to how to proceed to Henry Street as he previously had purchased a map and made his own plans for going there. In keeping with the specific instructions, he went to the place on Henry Street which had been previously designated and described to him in England. He stated that the full, detailed instructions which had been given to him in England were carried out. The contact was made on Henry Street, and the

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contact was wearing gloves and carrying an additional pair of gloves in his hands. Fuchs, on the other hand, had a tennis ball in his own hand, as per instructions. His contact came up to him and furnished his name as "Raymond." Fuchs furnished his own name. "Raymond" stated that he was pleased to meet Fuchs. He indicated he had been expecting him and he stated definitely that he was pleased to have been selected for such an important assignment. (X) u

He stated that no information was delivered to "Raymond" his contact, during this first meeting. It was his usual practice in England, and he followed it in this instance, in making contacts not to take anything in writing with him at the first meeting. He told "Raymond," in answer to questions, where he was living and where he was working. They also arranged to hold another meeting in the immediately near future. He discussed with "Raymond" his plans. He also discussed with him orally some of the officials for whom he was working and told him where, in fact, he was working at the time. "Raymond" specifically suggested that at future meetings Fuchs make sure that he was not being followed. The attitude of "Raymond" at all times was that of an inferior. At this first meeting Fuchs believes that he made a statement to "Raymond" about atomic energy, and he knows that the words "atomic energy" and "atomic bomb" were both mentioned, and "Raymond" must have known about them as he did not ask any questions of interpretation or explanation. He also believes that the comparative strength of an atom bomb was also mentioned at this first meeting, or it could have been at some subsequent meeting held soon thereafter. (X) u

Fuchs estimated this first meeting lasted about twenty minutes. They walked together during the course of the meeting in the general area where the first contact was made. Fuchs remembers that on one occasion he and "Raymond" did go together to a restaurant somewhere in New York -- it could have been on the occasion of this first meeting, although he does not remember this to be so. (X) u

In answer to a specific question as to whether the first meeting could have been in February or March of 1944, Fuchs stated that he felt reasonably sure that it was earlier than these dates, and that it was during the period when he was at the Barbizon Plaza Hotel. Fuchs was asked as to whether there was a playground nearby the point of the first meeting, and he said he could not recall this, but he did recall a row of flats (apartments or apartment buildings) in the immediate vicinity. (X) u

Fuchs stated he was motivated in keeping this initial meeting with Raymond in New York by a desire to aid the Soviet Union. He said he considered "Raymond's" status as that of an agent intermediary acting for and in behalf of the Soviet Union, in keeping with the plans which had been initiated in England and which first meeting he was carrying out in keeping with instructions which he received in England. (X) u

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SUBSEQUENT MEETINGS FOR ESPIONAGE PURPOSES IN NEW YORK CITY (S) U

Between December 1943 and August 1944 Fuchs stated that, in addition to this first meeting above-described, which he had with Raymond, whose photograph he identified as Harry Gold, there were held 4 or 5 meetings, maybe as many as 7 meetings, all told in the City of New York with Raymond. (S) U

At that time he was working with the Kellex Company as a Consultant. The work by this company was being done independently, but under the over-all control from a security standpoint of the Manhattan Engineer District. The office where he was employed as Consultant was on Wall Street at a place where there were three entrances to the building. His work and the work that he was concerned with was that of developing mathematical theories to furnish to the Kellex Company with principles as to what could go on in the gaseous diffusion process with questions of tolerances and the over-all problems of gaseous diffusion. He further advised that he was concerned with working plans with the size of a plant necessary for employment of the gaseous diffusion process, although not with the size of the labor force that might be required. During this period he and other British scientists were working on a series of papers identified as the MSN series. The number that had been written prior to the time of his departure to Los Alamos in August 1944 was about 19. Approximately 13 of this series were written by Fuchs himself. Others participating in the production of ^{this} series were Peierls, his immediate superior, Skyrme and one of the group papers was written by Bosonquet in England. This MSN series was known as primary papers containing matters of principles and all of those when prepared and all of those which he delivered to his Espionage contact, Raymond, were at the time of their delivery classified data. (S) U

Fuchs advised that, in addition to the first meeting which he had with Raymond (Harry Gold), there were additional meetings, the sequence of which he could not remember and many of the details he could not remember definitely, but he described these meetings in general as follows: (S) U

One meeting which Fuchs had with Raymond occurred in Manhattan near one of the middle bridges which he identified by a map as the Queensboro Bridge. The meeting occurred on the street corner very close to the bridge in what he would consider anything but an exclusive area. He remembers that during this contact he and Raymond walked underneath the bridge approach and from the description of the area, it was concluded that this was probably on First Avenue and not on Sutton Place. This meeting was held after dark as were most of the other meetings held in New York. This meeting occurred in the early part of 1944. (S) U

Another meeting between Fuchs and Raymond occurred just outside a subway station near Central Park and he believes this would be the "Museum" subway stop on the west side of Central Park West. In this instance Fuchs stated that he designated the place of contact because it was reasonably near his own place of residence on West 77th Street, but it was the usual rule (S) U

for Raymond to designate the places for contact. At this meeting arrangements were also made for a subsequent meeting between Raymond and Fuchs. (S) U

Another meeting held in the early part of 1944 was in the Bronx near a moving picture theater. From an examination of a map, Fuchs concluded that this meeting was held on Grand Concourse near 159th Street or 161st Street, at least in this general vicinity. In a subsequent discussion of the meeting in the Bronx he stated that the words "Fordham University" struck a familiar cord and it could be possible that the meeting was held near Fordham. However, he stated that this meeting, as were practically all of his meetings with Raymond, was of short duration and not likely to be of one-hour length either here or at any other place in New York. He believes that when he kept this appointment in the Bronx with Raymond he very likely went there by subway, and that at this meeting as in all other meetings held in New York there was an agreement and arrangement made for a subsequent meeting. They also had an understanding that, in the event they failed to make contact at any of the meetings arranged, they would meet at exactly the same hour either 1 week or 2 weeks later. (S) U

He described another meeting as having been held in the Borough of Queens. He estimates that when he rode the subway from Manhattan into Queens that this meeting was at a place approximately 20 minutes after entering the Borough of Queens after crossing the East River. He recalls having looked at a map before proceeding to this Queens meeting and he remembers noticing that the direction he would take would be in the general direction of an airport. He also recalls that the subway train on which he was riding left the underground and became an elevated prior to the time when he left the train for this particular meeting. At this point Fuchs was shown a copy of Hagstrom's map of Queens, New York, and after studying it he reached the conclusion that the general area in which the meeting was held is the area described on the map as "Jackson Heights". He, with his finger, made a circular motion describing the area which is bounded by Flushing Bay, LaGuardia Airport, St. Michael's Cemetery, Woodside, Elmhurst and Corona. He was unable to identify the subway or elevated stop or any of the streets by name since he stated he could not recollect the specific place, but could remember only the general area. (S) U

As best he can recollect, he had with him on this occasion a package of papers which had been written in longhand and which contained classified information about their work on the Atomic Energy project and, although he at times carried rolled up papers in his hands, he preferred to carry the rolled up papers in his pocket which he probably did on this occasion. His recollection is that the papers which were passed by him to Raymond and which were written in longhand by him, contained classified, highly confidential information with reference to his work under the general over-all security control of the Manhattan Engineer District. Although he stated he did not recollect specifically that any of the MSN papers were passed at this meeting, he did recollect to the best of his belief that two or more MSN papers were passed to Raymond by him at each of the approximately 5 meetings held after the first meeting. (S) U

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There was one other meeting which was arranged to be held in Brooklyn. Following an examination of a map of Brooklyn, he believed that this meeting was to be held in the general vicinity of Boro Hall, although it might have been held at the intersection of Fulton Street and Flatbush Avenue extension. This planned meeting was unsuccessful. Fuchs stated he arrived at the designated place and he recalls that there were some large public-looking buildings in the vicinity and the traffic was heavy. He stated that at all of the meetings held with Raymond, either in New York City or elsewhere, he observed no one who seemed to know Raymond and he had no one accompanying him at these meetings. (S) U

He is of the opinion that following the very first meeting described in the preceding section of this report that written confidential and classified information was delivered by him to his contact, Raymond. He advised that there would have been no occasion for any meeting except to deliver written information since the knowledge and background of Raymond was insufficient to enable him to understand technical details and his lack of scientific knowledge of the type necessary to understand the problems on which Fuchs was working would have made it very unlikely that he would have arranged any meeting with Raymond after the first for any purpose other than to deliver information in writing to him. (S) U

As for information furnished in the City of New York at the above-described meetings, Fuchs stated that he personally prepared about 13 of the MSN documents. He would first prepare a draft in longhand. On some occasions they would be sent to his immediate superior, Peierls, for reading and then, in turn, would be routed for duplication. In some instances, however, Fuchs, after preparing the rough draft, would route this rough draft which he prepared directly for duplication. In all instances when Fuchs prepared the draft a proof copy and the original draft would be returned by the duplicating staff to Fuchs. Each of the duplicated copies was numbered for control and security purposes due to the highly confidential character of the contents. Fuchs would then personally retain the original draft which he had written in longhand and he then, subsequently, personally furnished all of his own longhand drafts of his own composition directly to the individual known to him as Raymond, with the intention that he would serve as an intermediary in transmitting these secret documents to the Soviet Union and for the benefit of that country. The documents which he delivered were sometimes folded and other times were rolled up. Sometimes they were carried in his hand, but most of the time he would carry them in his pocket and he delivered these papers secretly, usually after dark, at the meetings which he had made by prearrangement with Raymond during the period from December 1943 to August 1944. The information which he furnished, Fuchs stated, had come to his knowledge by virtue of his official employment on the Atomic Energy project under the over-all control of Manhattan Engineer District. (S) U

During these contacts in New York City, as above-described, Fuchs stated that he furnished in writing information concerning the principles on

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the development of the mathematical theory, information concerning tolerances, the gaseous diffusion process, working plans, the size of a plant, and the approximately 13 of the MSN series which he had prepared personally. (S) U

He furnished in writing also from time to time in New York, as he received it, information as to the over-all and general effort and activities in connection with his own work relative to the production of fissionable material and its potential use as an explosive in the war effort and general information about membranes and their composition and, although he did not know the technical details at that time the general information concerning membranes and their composition which he did furnish was of a highly confidential type. (S) U

While in New York, he furnished information orally concerning the manpower employed by Kellex and the nature of the work being performed by the British Mission and all that he knew concerning personnel and general activities in the Manhattan Engineer District. He also advised orally that there was a plan for the building of a large plant somewhere in the southeastern part of the United States, which would employ both the gaseous diffusion and electro-magnetic processes. He stated that this plant was later constructed at Oak Ridge although he did not know while in New York the specific location. He furnished orally the identity of the officers and the high-ranking scientists who were employed by Kellex and those that he knew who were employed at Manhattan Engineer District at New York. He also discussed some of the personnel orally. At these meetings Raymond (Gold) never took notes. Highly technical information was not furnished orally due to Raymond's inability to understand. (S) U

As best as he can recollect, Fuchs stated he only missed one prearranged contact with Raymond in New York and at each of the meetings actually held in New York arrangements were made between him and Raymond for a subsequent meeting. (S) U

He stated that the only time he and Raymond traveled together in New York City was on one occasion only when both got in a cab and went to a restaurant at some place which he does not recall. (S) U

At the last actual meeting which he held in New York with Raymond, Fuchs stated he believes he told Raymond he was about to be transferred either to England or to Los Alamos and that, in the event he desired to get in touch with Fuchs, Raymond could contact his sister, Mrs. Kristel Heineman, whose address on 114 Lakeview Street, Cambridge, Massachusetts, Fuchs furnished to Raymond at that time. He stated that he did not like to bring his sister's name into this matter, but since she was in no way being involved in his Espionage activities, he decided it was the best way to permit a renewal of the contact in the event it were lost. Fuchs stated that some time subsequent to this meeting he traveled to Washington, D. C., where he conferred with (S) U

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Sir James Chadwick, a representative of the British Mission. At this meeting with Sir James Chadwick, Fuchs learned that he was to be transferred to Los Alamos and would, therefore, not be going back to England. Prior to actually leaving for Los Alamos, Fuchs made a trip from New York City to Cambridge, Massachusetts, where he saw his sister. At this time Fuchs informed his sister that she might be contacted by an individual whom Fuchs designated by some name which he does not now recall, but which name may have been Joseph or Jack. Fuchs told her that this individual would say at the time of meeting that he brought "greetings from Karl". These arrangements had previously been agreed upon between Fuchs and Raymond. Kristel Heineman, when contacted by Fuchs in this regard, was agreeable to being so contacted. (S) u

Fuchs was asked if, during the period he was in New York, he could have told his contact that he was going to Mexico instead of New Mexico. Fuchs stated that he was sure that he had not stated that it was Mexico inasmuch as he had no intention to go to Mexico in connection with any Atomic Energy work. Fuchs also stated that he believes that he gave his apartment address of 128 West 77th Street, New York City, to Raymond at the next meeting following his moving to that address. (S) u

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FUCHS' TRANSFER TO LOS ALAMOS (X)U

As set forth in the preceding section, it was definitely decided in the meeting Fuchs had with Sir James Chadwick in Washington, D.C., in July, 1944, that Fuchs would be transferred to Los Alamos to work on the Atomic Energy Project there rather than returned to England. In accord with this, Fuchs traveled to Los Alamos, New Mexico, where he arrived on about August 14, 1944, and where he worked as a physicist in the Theoretical Division of the Laboratory. While Fuchs was still an employee of the British Mission he was at Los Alamos, working under the over-all control of MED. He was working on confidential and classified research and was, through his employment in the Theoretical Division, given access to practically all of the information with respect to the plans for the detonation of a plutonium bomb. He learned of the contemplated use of the implosion theory in such a detonation and began work on various aspects of such a detonation, including the Lens System, various implosion designs, the theory of the jets in connection with implosion, and similar confidential work as an expert physicist. At Los Alamos he was assigned a room in a dormitory in the restricted area. (X)U

ESPIONAGE CONTACT IN CAMBRIDGE, MASSACHUSETTS, FEBRUARY, 1945. (X)U

As stated, Fuchs was transferred to Los Alamos in August, 1944. He advised that the German Communist Party would likely have information on all the members of his family. He, Fuchs, did personally belong to the branch of the German Communist Party in England after he came to London. It is quite likely that he furnished biographical information concerning his sister, then residing in the United States, to this underground Communist movement in England. He never furnished any biographical data on any other American. Thus, it was hardly necessary for him to mention his sister and her address; although it was suggested that his sister be used as a contact, he does not know for sure whether he made this suggestion or whether it was made by someone else. He did not like to use his sister's home as a contact place, but did agree to it since it did not involve her, but if she did suspect anything she would think it was in connection with Communist Party work. (X)U

Fuchs stated he visited his sister in Cambridge in February, 1945. He had planned at first to visit her at Christmas, 1944, but this trip was cancelled. It is probable that he wrote to his sister that he would visit her. (X)U

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later in February, 1945, since this was about the time of the birthday of one of his sister's children. While he was visiting his sister in February, 1945, his sister, Kristel Heineman, told Fuchs that his contact (he believes the name "Joseph" or "Jack" was used) had visited her and she had told this contact that Fuchs was coming in February, 1945. He also advised on another occasion that it was possible that his sister had written to him at Los Alamos, advising that "Joseph" had called. A contact, Raymond, (later identified as Harry Gold) did visit his sister's home while Fuchs was there in February, 1945. He did not like this meeting to be in his sister's home, but he accepted it. No espionage matters were ever discussed in the presence of his sister. The contact, Raymond, came to the door and probably asked for Fuchs, and when he was informed that the contact was there he called down from upstairs for Raymond to come up to Fuchs' bedroom. His sister may have been there in the bedroom with them for a minute or so. He does not recall this as being so, however, nor does he recall telling his sister to leave -- although he probably would have done so had she been there. He does not recall that Robert Heineman was there at any time while Raymond was present. He believes that in the home at the time Raymond was there were his sister, possibly her children, and Fuchs. The call was made in the latter part of the forenoon and lasted for ten minutes, or perhaps some longer period of time, but Raymond did not stay for lunch. He recalls that his sister told him that on a previous visit of the contact to the sister's home, the contact, Raymond, had brought some chocolates for the children, although he does not remember a book having been mentioned. (S) U

The conversation which took place between Fuchs and Raymond in Fuchs' bedroom at his sister's, Kristel Heineman's, home in Cambridge, covered the following matters:

Arrangement for a meeting in Boston within a day or two;

The contact requested the information of an up-to-date type and Fuchs told him that he would prepare notes on the detailed principles of the atom bomb construction for delivery to him at Boston;

Arrangements were made for the meeting in Boston at a specific place, time and date;

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During this meeting at Kristel Heineman's home, Fuchs gave Raymond a yellow city street map of the City of Santa Fe, New Mexico, which was used as a basis for planning a subsequent meeting there in June. Fuchs stated he personally brought the map with him from Los Alamos for the purpose of arranging this subsequent meeting in Santa Fe. It is to be noted that Fuchs was shown a map of the City of Santa Fe, New Mexico, issued by the Santa Fe Chamber of Commerce, and he stated that it was exactly the same type of map which he had furnished to Raymond at the Heineman home in February, 1945. Due to the fact that Raymond was employed somewhere on a regular basis and had difficulty in arranging to get away, it was Raymond who selected the time for the meeting. The meeting was to be held on Alameda Street, which runs alongside the River and Raymond was to be walking on this street in the vicinity of trees and park benches, and Fuchs was to pick him up in a car there. (S) U

Fuchs stated he then, in Kristel Heineman's home, prepared a paper which was the first really detailed paper he had prepared concerning atom bomb construction. He later stated that he had no physical recollection, however, of preparing the paper, or in which room it was prepared, or if he actually sat down at a desk and prepared it. He stated, however, that he did not bring any papers with him from Los Alamos. Thus, it was logical to assume that he prepared them at his sister's home. (S) U

His contact, Raymond, never spoke of his contacts in any way, never referred to them as "he," "she," "they" or "my people." He indicated at no time any personal interest in the information that was being furnished. Fuchs does not recall whether Konstantin Lafazanov came in while the contact was there, but Fuchs knows that he did not want Raymond to stay long and he more or less pushed him out in order to terminate the meeting. There was no indication during this conversation that Raymond had tried to reach him in the meantime, the mails had not been used, he had no message through any other channel -- although his sister had written him, he believes, that "Joseph" had been in. The letters from his sister were in English. (S) U

While he was at the Heineman home he recalls that Wendell Furry came to the house on a visit. He remembers no telephone calls or telephone numbers having been left in any way for him to make use of in making a contact. He does not remember the telephone number Academy 2-2677. He does not remember the name J. or Jerome Kaplan or Kaploun. He would not say with positiveness that this number had not been left, but that it would have been a most unusual thing and that he has no recollection of it whatsoever. He stated he (S) U

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positively did not visit his sister in Cambridge at Christmas, 1944. During this meeting in his sister's home he stated he recalls that Raymond offered him some money. He does not recall the specific amount -- whether it was \$500 or \$1500, but he refused the offer as he was not interested in accepting any money for what he had been doing. (S)U

Fuchs stated that he had expected to be contacted at the Heinsman residence in February, 1945, by Raymond in view of the fact that he had, at his last meeting with Raymond in New York City, prior to going to Los Alamos, informed Raymond that contact could be established if necessary through his sister, Kristel, and Fuchs also stated that he was aware that Raymond had called at the Heinsman home prior to his visit there. (S)U

ESPIONAGE CONTACT IN BOSTON, MASSACHUSETTS, FEBRUARY, 1945 (S)U

Fuchs stated that in keeping with the specific arrangements made while he was meeting with Raymond in Kristel Heinsman's home a day or so previously, he, Fuchs, met Raymond in Boston, Massachusetts. This was in February, 1945, just a day or two after the meeting in his sister's home. He remembered that the meeting was held at a place close to the River, near a large, public building on a street which was not particularly wide. He was uncertain, but after examining a map, he believed it was in the general area near North Station. At this meeting in Boston no oral information was furnished to Raymond by Fuchs, because he knew Raymond would not understand any oral, confidential information of a technical nature. Information, however, was furnished in writing as follows: (S)U

Most of what was then known concerning implosion;

Classified information data dealing with the whole problem of making an atom bomb from fissionable material as he then knew the problem;

The agreed upon, as well as the prospective plans for the construction and production of an atom bomb, as then known to him;

Information as to the principle of the method of detonation of an atom bomb;

Some information known to him as to the type of core;

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The principle of the Lens System which had not yet, at that time, been finally adopted;

The size as to outer dimension of the high explosive component;

The possibility of making a plutonium bomb;

The fact that a high explosive as a type of compression was considered, but had not been entirely decided upon;

The difficulties of multiple point detonation as this was the specific problem on which Fuchs was then working;

The highly spontaneous fission rate of Plutonium 240 -- He stated he did not at that time know of the designation of this substance as Plutonium 240, he knew it to be a type of plutonium but it later became known as Plutonium 240;

The comparative critical mass of plutonium as compared with Uranium 235;

The approximate amount of plutonium necessary for such a bomb;

The current ideas as to the need for an initiator.

It is his estimate that this written, longhand document containing the above information, known to him to be classified and highly confidential, was prepared on six or more pages in longhand, in English, and the document concerned itself mostly with matters of principle and was written in such a manner that a physicist could understand it, although Raymond, he felt sure, could not. The main point of emphasis in the paper which was delivered related to the principle of implosion and the outer dimension of the high explosive. The document was prepared in English, written in longhand, and no part of it was coded other than the use of symbols employed by scientists. (S) (u)

He was in the earlier meetings, specific and positive about the meeting being held in Boston. Along toward the concluding meetings he was informed that Gold, in his confession, had indicated that this written document had passed at Cambridge in his sister's home, and he stated that he frankly had no physical recollection of the meeting in Boston, but he does recall having papers with him in his possession at Boston for the purpose of delivering them to Gold, and it is his recollection that the papers were prepared in his sister's home, after the contact in February, 1945, for, since he

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brought no papers with him from Los Alamos, he had no papers ready for delivery when Raymond arrived at his sister's home, as his best recollection, based on logical reconstruction, was that he prepared the papers at his sister's home and did deliver them at Boston within a few days thereafter. It is noted that in giving a signed statement Fuchs stated that the arrangements made in his sister's home for the meeting in Boston, and for the preparation of the papers, were made without the knowledge of his sister or her husband, that they were not present during the discussion he had with Raymond and they had no knowledge of the purpose of the discussion. Under prolonged and continuous questioning concerning the meeting in Boston, Fuchs' position changed from that of positiveness -- even giving, as above shown, the physical location of the meeting, to one of a rather nebulous type when he stated he had no physical recollection of the meeting in Boston. (S) U

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THE FIRST SANTA FE, NEW MEXICO, ESPIONAGE CONTACT IN JUNE, 1945 (S) U

In keeping with arrangements which had been made in the home of Fuchs' sister (Kristel Heineman) in Cambridge, Massachusetts, in February, 1945, Fuchs stated that he would meet his contact Raymond in Santa Fe in June, 1945. He had shown Raymond on a map where they would meet; and they did meet at the place indicated on Alameda Street, where it lies alongside the river, and between Castillo Street and Dalgado Street, where there are trees and benches adjacent to the street. After they met, Fuchs then went after his car which he was using, and he then picked up his contact Raymond, and together they drove across the river bridge and turned left into a lane which terminated at a gate. They stopped the car, sat in the car, and talked together at this deserted spot. (S) U

While there in the car, Fuchs delivered in writing as much information of an up-to-date type as he had concerning the A-Bomb. He also informed Raymond of the fact that a test explosion was soon to be held in July at Alamogordo, and he also furnished additional information at this time which he possessed concerning implosion. He gave in writing a description of the plutonium bomb which was soon to be tested. He furnished more information than had heretofore been furnished concerning the ignition of the bomb, although this ignition system had not yet been completed. He furnished in writing the principles of IBM calculations, the methods of calculating efficiency and the results of the efficiency calculations. He stated that as best he recalls, his estimate as to the calculated efficiency ran from a small percentage to as high as 50%, which he subsequently recalled in comparing it with the actual results of efficiency tests of the Hiroshima explosion which was about [redacted] and the later Nagasaki explosion which was about [redacted]. He also furnished in writing information concerning the size of the bomb, and the plans to use the bomb against Japan if it were found effective in the test. He knew that work was going on on the gun but he knew very little about it. He probably referred to it in his written communication. He prepared a sketch of the bomb and its components with important dimensions indicated, and he drew a simulated sketch covering a period of about ten minutes, which as best he could recall was similar to the sort of sketch he turned over to Raymond at this meeting. He also furnished information as to the type of core, a description of the initiator and details as to the tamper. (S) U

Orally at this meeting while in the car, Fuchs advised that he furnished the names of the types of explosives to be used in the bomb, the approximate site of the Trinity test which was soon to be made, and that the A-Bomb according to calculations would be vastly greater in its explosive force than large quantities of TNT. He furnished, in fact, a specific figure to establish a comparison. (S) U

He stated that his paper was written in longhand, and in its preparation prior to the time when he left Los Alamos, he consulted official classified documents at Los Alamos in preparing the longhand data which he delivered to his espionage contact Raymond. He remembers specifically that he examined official documents to obtain information concerning the special method of detonation, the IBM calculations and the result of the efficiency calculations. He stated that (S) U

b3
per
DOE

para 2 Lines 13, bracketed info.
Withhold per 6/31 exemption
per DOE letter dtd 5/15/98. -24-
SSA 566) SW/JS 7/10/98
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Raymond (now identified as Gold) told him on this trip that he had had trouble getting there due to his difficulty in getting away from his regular employment. Fuchs stated it is quite likely that he made notes in a diary he was then maintaining as to the dates of his contacts, but he is not sure that he made a note as to the date of this particular meeting. His diary, he stated, had long since been destroyed. (S)U

SECOND SANTA FE ESPIONAGE CONTACT IN SEPTEMBER, 1945 (S)U

Fuchs stated that at first he lived in Los Alamos on the reservation in the dormitory, and some time later he moved to what was known as "The Big House." During this time, he was still engaged as a physicist on A-Bomb research work in the Theoretical Division at Los Alamos under the over-all control of MKD. (S)U

At the meeting held in June, 1945, at Santa Fe, arrangements were made for a second meeting in the fall of the same year at Santa Fe; the date, time and place of the meeting were fixed in this initial Santa Fe meeting. The date of the second meeting at Santa Fe was probably September, 1945, as he recalls that it was prior to the time when he went to Mexico City with Dr. Peierls and others in November, 1945. The specific date he does not now recall, but it was probably on one of his days off. They were allowed shopping days without annual leave being charged, and he believes it was on one of these shopping days. He recalls that at first in Los Alamos they worked for six days a week, and subsequently for five days a week. He is quite sure that this meeting in September, 1945 was not on Sunday. (S)U

He received no indication from his contact Raymond (Harry Gold) as to how Raymond had travelled to Santa Fe, but it must have been by train. He believes that Raymond indicated he was going to return via Albuquerque, and he recalls that after their meeting had terminated, he let Raymond out of the car at a point fairly close to the bus station. (S)U

He met Raymond, as per the agreement made during the previous June, as he was walking along Bishops Lodge Road, he believes between Hillside Avenue and Kearney Avenue. Fuchs believes that he picked Raymond up in his car and they drove on out Bishops Lodge Road to a lonely place where the car was stopped and a discussion was held. (S)U

During this discussion, no arrangements were made for another meeting between Fuchs and Raymond in the United States, first, because Raymond felt that he would be unable to make arrangements to get away from his job, and second, because Fuchs had heard intimations that he might go back to England in January, 1946. (S)U

During this conversation in this instance between Fuchs and Raymond, they did make arrangements for a meeting between Fuchs and another espionage contact to serve as an intermediary in transmitting information to the Soviet Union, and (S)U

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this meeting was to be held in London. Fuchs stated he selected the place for the meeting at Moxington Crescent, which is the name of an under-ground (subway) station in London. This station is large, about 190 yards in length, and there is a lift (elevator) and stairs. Fuchs stated that according to these arrangements, he was to have a copy of Life Magazine with him, and his new contact was to have a bundle of several books with a cord tied around them. Some passwords, which he does not now recall, were to be used. The date of the month and the specific hour of the day was fixed with a recontact to be made if the first attempt to meet failed, and the recontact was to be at the same time and on the same day of the month either one month or two months later. (Fuchs advised that these plans which they made for the meeting were never consummated due to the fact that he read about the Canadian Spy expose, and he made other arrangements on his own initiative.) It was necessary, Fuchs said, for him to designate the place in London where they were to meet since Raymond (Gold) was not acquainted with London. (X) U

Fuchs stated that no plans were made for any further contacts at his sister's home or anywhere else in the United States, not even in the event an emergency arose. He advised that he remained in Los Alamos until June, 1946, and from the date of the September, 1945 meeting with Raymond until he left Los Alamos in June, 1946 for England, no contacts were made with Raymond, and no consideration was given to a subsequent meeting in the United States because he did not know how he could arrange it, and he doubted if there was even any consideration given to the possibility of such a meeting at that time. Fuchs stated that he left Los Alamos and went to see his sister at Cambridge, Massachusetts, on the last day of June, 1946. (X) U

He stated that when he left Los Alamos to keep this second meeting in September, 1945 with Raymond, he drove his car while en route off the side of the road in a desert between Los Alamos and Santa Fe, and there wrote a paper in long-hand based on information which he retained in his memory. He said "I had enough in my head to do this." He turned this paper which he prepared over to Raymond as an espionage contact, with the full intention and purpose that it would be transmitted through Raymond to and for the benefit of the Soviet Union and its Atomic Energy research and construction program. He does not believe that his report contained any information as to the results of the Japanese explosions, because he believes that Dr. Penny's report concerning this was later prepared. (X) U

Included among the information furnished by Fuchs in writing, unless otherwise indicated, to Raymond for transmittal for the use by the Soviet Union, were the following: The fact that the production of U-235 was about 100 kg per month; that the production of plutonium was about 20 kg per month; there was no stock pile in 1946 as there were only very few A-Bombs, and the diverting of material (isotopes) into medical and other research work was very small. He stated he was about 20 miles from the A-Bomb fission trial at Alamogordo, i.e., "the "Trinity test", and he viewed the results that were observable from this position. At Los Alamos, his work was concerned with figuring out where things might go wrong in the bomb action, and later at Los Alamos he worked on blast waves, specifically the tail end of the blast waves. Only so far as it entered into the interpretation of experimental results did he know of the effect that the bomb would have on human life. He furnished to Raymond, he stated, whatever he knew. U (X)

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The uranium bomb at Los Alamos was an appendix, not much interest being shown in it there, and he knew no one concerned with the gun at Los Alamos. He furnished specifically in writing to Raymond the results of the Trinity tests, and advised if the English were keeping up with the United States. He also furnished data on his work on the initiator; the rate of production; and although he did not know much about it, he may have said something about the preassembled core and compass. The changes are that he did. He furnished information concerning the critical size which would be important only if one wanted to know how many bombs were being made on the basis of the rate of production of materials. He believes that he passed information to Raymond that the barriers were to be of "sintered nickel." (S) U

Information learned by Fuchs while he was in the United States, and an indication based on his recollection as to whether he did or did not furnish this information as specified below to his Russian espionage contacts, is listed below, with no indication as to whether the information was passed in the United States or subsequently in England. It will be noted that from some of the dates of the meetings at which some of the subject matters were discussed, that it would have been impossible for this information to have been delivered to Raymond by Fuchs at the September, 1945 contact between them, due to the fact that the meetings were not held until subsequently. Thus, his logical rationalization that this was subsequently furnished in England when he indicated that the information was passed to his Russian espionage contact. (S) U

As for the document known as MSN-18, the title being "Adaptation of K-25 Plant for Partial Operation on the Cascade of Cascades Principle—Flow Sheets VIII a, b and c," he stated that he knew that this problem was discussed, but did not know that a paper had been issued concerning it. He had heard nothing concerning K-25 at Los Alamos, and if he passed any information at all about it, it was prior to his going to Los Alamos. The Cascade of Cascades was considered previously in England, and was transmitted to his Russian espionage contact in England prior to his coming to the United States. He transmitted nothing at any time concerning the operations at Hanford, and he did give more than an indication of the composite bomb and its economic features. He did this at either the September meeting in Santa Fe, or at the first meeting in England, and he furnished it in writing, he recalls. There was included, also, the economic features of the composite bomb at the September, 1945 meeting in Santa Fe. This data was furnished, he feels sure, as well as in a subsequent meeting which he held in England with an espionage contact after his return to England from Los Alamos. He stated that he did not furnish any information concerning the problem in achieving a non-equilibrium reaction which was discussed at the April super conference at Los Alamos, but he is quite certain that he did furnish to his Russian contacts information concerning the inverse Compton radiation cooling effect. He furnished some information concerning diffusion plant problems - barriers, but this was only a limited amount of data, and he furnished nothing as to conditioning such problems. He stated that he did not furnish information contained in the address by Mr. Teller in Mr. Bradbury's office at one of the first super conferences, nor did he furnish any information concerning the contents of a talk by Mr. H. Harwitz who spoke at the second "super" meeting. U (S)

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Concerning the indicated suggestion of Dr. von Neuman, who suggested the ignition of the super bomb by the implosion process, he stated laughingly that this was his, Fuchs', suggestion, and that he did not furnish information concerning the ignition of the super bomb by the implosion process. There was no information furnished concerning the suggested cylindrical rather than the spherical implosion gadget, nor did he furnish any information concerning the contents of discussions by Messrs. Metropolis and Turkevich at the third super meeting. Also, he furnished no information to his Russian contacts concerning a discussion by Mr. Lauderf at the fourth super meeting. He could not recall the subject matter of the fifth super meeting at which Mr. Teller presided, and the subject matter was not furnished to him. He furnished some information about the idea but none concerning the details relative to the development of slow explosives. He is unable to identify what was discussed at the meeting in June, 1946, presided over by Daral Froman at a meeting of the Interim Council when Milo Sampson spoke. (X) U

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INFORMATION FURNISHED BY FUCHS TO ESPIONAGE CONTACTS (S) U

Fuchs stated that, generally, information of a technical type was given to Raymond in writing. He maintains that at no time did he have any other contact, nor was he associated with anyone else, in the United States directly or indirectly in espionage activities. His American contact, Raymond (he later identified his photograph as Harry Gold), would not be able to understand technical information furnished orally; thus, to a considerable extent and generally, the oral information dealt with personalities, the identities of scientists, plans for the test explosion at Alamogordo, and things that were within the scope of comprehension of his contact. He advised that Raymond never took notes at any meeting. (S) U

He stated that his best estimate is that the information furnished by him speeded up by several years the production of an A-Bomb by Russia because it did permit them to start on the development of the explosion and have this ready by the time the fissionable material was ready. His estimate of "several years" is based on a speculation as to how good the Russian scientists are and how far advanced the Russian development was at the time. His conclusion is that the Russian scientists are as good as the scientists in England and in the United States, but there are fewer good scientists in Russia than in the United States and England. He gave his Russian espionage contacts nothing which would speed up their production of plutonium, and he estimates that if he had given the same data, which he gave to the Russians, to the United States, as of the date of his arrival in the United States, he would have speeded up the American production of an A-Bomb only slightly. He did pass on to his espionage contact what he learned concerning the production of plutonium during the final period of his work at Los Alamos. Upon further reflection, he stated that the information furnished by him alone could have speeded up the production of an A-Bomb by Russia by one year at least. He advised that if Russia got no information on the plutonium process from any other source, his data, as furnished them, could not have been of material assistance on this plutonium phase. (S) U

Information Concerning H-Bomb (S) U

Fuchs claims to have furnished no information to his Russian contacts concerning the H-Bomb while he was in America. As far as information furnished by him on this subject is concerned, he referred to a statement obtained from him by Mr. Michael Perrin who is a British Consultant in Atomic Energy Development and who interviewed him at the request of American authorities, and a report has been submitted by Perrin. (S) U

During the last period of his work in Los Alamos, Fuchs said he did some research work on the H-Bomb, including hydro-dynamics as involved in the U. S. work. He was arguing with himself about this time concerning working on the H-Bomb, and although he subsequently passed on to his espionage contacts in England what he had learned in the United States, he was then nevertheless possessed of some doubts as to the wisdom or propriety of his action. (S) U

In referring back to his first paper delivered to his contact, "Alexander," in England, he stated that this paper, he recalls, was confused, and he stated in

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comparison his information concerning the H-Bomb work in the United States at the time he returned to England was also best described as a confused picture. He stated that when he, Fuchs, left Los Alamos, however, he knew as much as anyone at Los Alamos about the matter - but much has since happened. (S) U

(X) Information Delivered by Fuchs to Gold in New York City, December 1943 to August 1944

Written Information Furnished:

1. His longhand drafts of the 13 MSN papers prepared by him, and all of the information contained in those papers at the time he delivered them was classified.
2. He furnished what he knew, and that was quite much, concerning gaseous diffusion, which was later applied in the production process at Oak Ridge, but he knew hardly anything about the electro-magnetic process, although he furnished what he did know.
3. He furnished general information concerning membranes and the composition of sintered nickel powder. Although he did not know much about the technical details, he furnished the information as to the principle.
4. He furnished information concerning the general scale of the effect of the American program, with the approximate timing of this program.
5. He furnished information from time to time, as received by him, concerning the over-all and general effect and activities in connection with his own work relative to the production of fissionable material and its potential use as an explosive in the war effort.

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Oral Information Furnished:

1. Information as to the address of his sister, Kristel Heineman in Cambridge, Massachusetts, for contact purposes.
2. At each meeting in New York he and Gold agreed orally as to the details of time and place for the next planned meeting.
3. He furnished information concerning the identity of officers and the identity of leading research personnel at The Kellogg Company and The Manhattan Engineering District in New York. He also furnished information concerning personalities and the general personnel situation at these establishments.
4. He furnished information that a plant was to be established for the production of fissionable material, to employ both the gaseous diffusion and the electro-magnetic processes in the development of fissionable material, such materials to be used in the development of an A-Bomb, and the plant was to be built somewhere in the southeastern part of the United States (later at Oak Ridge).

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(X) Information Furnished at Cambridge, Massachusetts, February 1945 (S) U (S) U

Fuchs stated that he passed no written information to Gold at Cambridge, Massachusetts, during a meeting at the home of Fuchs' sister, Kristel Heineman. He did furnish the following oral information: (S) U

1. Oral plans for a meeting soon afterwards in the City of Boston.
2. Oral plans for a meeting to be held in June, 1945, at Santa Fe, New Mexico, and in making these plans a detailed street map was examined. He agreed to prepare for delivery to Gold at Boston a paper containing additional confidential, classified information. He agreed that the information contained therein would bring the information which he possessed up to date as far as passing such information to his contact was concerned.
3. He received an oral offer of money from Gold; he does not recall the specific amount, but he turned down this offer and stated he would not do such a thing.

Information Delivered at Boston, Massachusetts, February 1945 (S) U

Fuchs claims that he furnished no classified oral information at the Boston meeting, held within a few days after the meeting at his sister's home, but that he did prepare a written paper which, he believes, was prepared by him in his sister's home and which he delivered at the heretofore described meeting in Boston. This information was all in writing and consisted of:

1. Details of the principle of A-Bomb construction.
2. The principle of the method of detonation.
3. The decisions made up to that time as to the type of core - he knew nothing then concerning a solid core.
4. The principle of the lens system, although it had not yet been definitely adopted.
5. The outer dimensions of the high explosive and the lens system.
6. The possibility of making a plutonium bomb.
7. Most of what was then known concerning implosion - this was the main point covered by this paper.
8. That high explosive was the type of material for compression being considered, although it had not been entirely decided upon.
9. The difficulties of multiple-point detonation, on which Fuchs was then working.
10. The sequence of timed explosion.
11. The agreed-upon, as well as the prospective, plans for the construction and the production of an A-Bomb, as was then known to him.
12. The high spontaneous fission rate of Plutonium 240. (Although he did not know the material as Plutonium 240 at that time, he knew it was a type of plutonium.)
13. The critical mass of plutonium as compared with Uranium 235.
14. The approximate amount of plutonium necessary for such a bomb.
15. The current ideas as to the need for an initiator.

He does not believe that he disclosed at that time the amount of U-235 that was required in the production of an A-Bomb. Likewise, he did not know whether mention was made at this meeting of the sintered nickel powder. (S) U

Information Delivered at Santa Fe, New Mexico, June 1945 (S) U

Written Information Furnished:

1. A description of the plutonium bomb.
2. A sketch of the bomb and its components, with important dimensions indicated. (There is attached a reproduction made by Fuchs in about ten minutes of what he believed is a similar sketch furnished at this meeting.)
3. As much up-to-date information concerning the bomb as he then knew.
4. Additional information concerning implosion.
5. Additional information concerning ignition - although this research was not yet finished.
6. The principle of IBM calculations.
7. The method of efficiency calculations.
8. The results of efficiency calculations, his estimates being from a small percentage to fifty percent.
9. The size of the bomb.
10. The intention to use the bomb against Japan.
11. The type of core.
12. A description of the initiator.
13. Details as to the tamper.

Oral Information Furnished:

1. The names of the types of explosives to be used in the bomb.
2. The fact that the Trinity test explosion of the A-Bomb was soon to be made, and the approximate site of the test.
3. That the explosive effect of the A-Bomb would be vastly greater than TNT, and a comparative statement as to the amount of TNT was actually furnished. He knew at this time that work on the gun was going on, but he knew very little about it.

Information Delivered at Santa Fe, New Mexico, September 1945 (S) U

Written Information Furnished:

1. That the production rate of U-235 was about 100 kg. per month.
2. That the production of plutonium was about 20 kg. per month.
3. Information developed by him in connection with his work, concerned with figuring out where things might go wrong.
4. Information concerning blast waves, especially the tail end of the blast waves, as he was doing work on this.
5. Results of the Trinity tests and whether the English were keeping up with the U.S.A. in developments.
6. His work on the initiator.
7. The rate of production.
8. He may have furnished something concerning the pre-assembled core and compass, and the chances are he did, he advised.

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9. The critical size, which would have been important only if someone wanted to know how many bombs were being made, based upon the rate of the production of materials.
10. He believes he passed information that the barriers were to be of "sintered nickel."
11. The special technical phase of plutonium, and the uses of a special alloying constituent.

Fuchs stated that, as of the time of the September, 1945, meeting, the uranium bomb at Los Alamos was an appendix and not too much interest was shown there in this type of bomb, and he knew of no one at Los Alamos concerned with the gun. He advised that he knew of no stock pile of A-Bombs in 1946 since there were only a very few available, and that the diversion of the isotopes material into medical and industrial research was very little. He was about twenty miles from the A-Bomb fission trial at Alamogordo, New Mexico, and observed what could be seen from that distance. He advised that only so far as it entered into the interpretations of experimental results would he know of the effect of an atomic explosion on human life. He knew nothing at this time as to the change of design concerned with gaseous diffusion or electro-magnetic forces, although he knew a small amount about making a compact machine for gas.

* Information Delivered in England after Return from U.S.A. between June 1946 and February 1949

1. Data on the probability of predetonation, and he relied on his memory in furnishing this information.
2. Working on the calculations involved in the tests in connection with the Japanese explosions, although the information possessed by him and furnished by him was not the accepted figure, he believes.

For added pertinent information, he made the following comments concerning the delivery or nondelivery of information to his Russian espionage contacts in the United States or in England, and it would appear that perhaps most of this information which was delivered would have been in England since he claims to have had no contacts for delivering espionage information in the United States after September, 1945:

1. As to the document referred to in MSN-18, entitled "Adaptation of K-25 Plant for Partial Operation on the Cascade of Cascades Principle - - - Flow Sheets, VIII, a, b, c," he advised that he does not remember this report. He recalls that the problem was discussed, but he did not know a paper had been issued concerning the subject. He had heard nothing concerning K-25 at Los Alamos, and if he passed any information at all concerning K-25, it would have been prior to his going to Los Alamos. The Cascade of Cascades principle was considered in England previous to his coming to the United States and was transmitted to his Russian

espionage contacts in England prior to his arrival in the U.S.A. He furnished no information dealing with the work at Hanford, Washington.

2. He did give more than an indication as to the composite bomb and its economic features, this information having been given at the last meeting in Santa Fe in September, 1945, and the first meeting in England thereafter. The information was transmitted in writing. He furnished no information concerning the problem of achieving a non-equilibrium reaction, and he does believe that he furnished information concerning the inverse Compton radiation cooling effect.
3. Concerning thermo-nuclear weapons, he advises that he furnished, roughly, the information which was in the Fermi lectures as distinguished from the information set forth in the "Super" Handbook. He furnished some information relative to reactions in England as well as a certain limited amount of information concerning barriers, but no information concerning conditioning in the diffusion plant problems.
4. Concerning the first "Super" conference in Mr. Bradbury's office, which was addressed by Mr. Teller, he furnished no information which was discussed there. He furnished no information concerning the second "Super" meeting, presided over by Mr. Teller, and information discussed by Mr. H. Hurwitz. Fuchs claimed to have been the one who suggested the ignition of the "Super" bomb by the implosion process. He furnished no information concerning the suggestion of the cylindrical rather than the spherical implosion gadget. He furnished no information which was discussed at the third and fourth "Super" meetings. He cannot recall the subject matter at the fifth "Super" meeting. He did furnish the identity but not the details concerning the development of slow explosives as discussed by Mr. Stout in Fuchs' presence. He could not identify the subject matter of Mr. Milo Sampson's talk at a meeting held on June 3, 1946.

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VISITS BY FUCHS AWAY FROM PLACES OF REGULAR
ASSIGNMENT WHILE IN THE USA (S) U

Fuchs advised that after his arrival in the United States in December, 1943, he was assigned as a part of the British Mission which had offices at 43 Exchange Place, New York City, and which was working under the over-all control of the Manhattan Engineer District. His first trip away from New York City after this assignment was when he went to visit his sister, Kristel Heineman, in Cambridge, Massachusetts, during Christmas, 1943. (S) U

In the Spring of 1944 (actually May 29 and 30, 1944) Fuchs made a trip to Montreal, Canada, for a conference with Canadian scientists, and he stated that the purpose of this trip was to accompany Professor Peleris who had found it necessary to go to Canada to discuss atomic problems. Fuchs was unable to remember the names of the scientists contacted there except for the names of Halesan and Kowarski. He said that he traveled to Canada by air and also returned to New York City by plane. Fuchs said that this trip had no direct connection with any espionage engaged in by him. Fuchs also visited his sister during the Spring of 1944 on several occasions. He stated that they were probably at one-month intervals, and he believes that he went there at the time of a birthday anniversary occurring in May, 1944. He also made a trip to see his sister shortly before he left for Los Alamos in August, 1944. (S) U

In July, 1944, Fuchs recalled that he traveled to Washington, D. C., where he conferred with Sir James Chadwick, the British Atomic Energy representative, and at that time a definite decision was made that he was to go to Los Alamos rather than return to England. (S) U

After Fuchs arrived in Los Alamos in August, 1944, he remained there until February, 1945. This was his first trip off the restricted reservation area. (S) U

Fuchs also recalled that on one occasion, while at Los Alamos, he made a trip in an Army bomber to Washington, D. C., for a conference, returning to Los Alamos, also in an Army plane. He does not remember the exact date of this trip, but the purpose of it was in connection with his official work. (S) U

During November, 1945, Fuchs left Los Alamos to go to Montreal, Canada, for work for the British Ministry of Supply who were attempting to engage people for work at Harwell, England. He was supposed to meet the particular individual whom he was to contact there in Chicago, but because of his planned vacation in Mexico he traveled to Montreal, Canada, to make this contact. (S) U

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Fuchs, following this conference, returned to Albuquerque, New Mexico, where he met Mr. and Mrs. Paterls and Mrs. Edward Teller, and they then traveled to Mexico City on a short holiday. They returned from Mexico to Los Alamos in early December, 1945. Fuchs stated that this trip by the group to Mexico City was in no way connected with his espionage activities. During June, 1946, Fuchs left Los Alamos permanently, being transferred back to England. At that time he traveled to Washington, D. C., and he believes that he recalls staying at the Hotel Sheraton. He then traveled to his sister's home in Cambridge, Massachusetts and made a trip from there in company with his sister, Kristal, to Schenectady, New York, where he was in contact with Hans A. Bethe. (S) U

Fuchs was questioned with regard to the purpose of this trip and he stated that Bethe had been connected with the Theoretical Division at Los Alamos, and he had desired to talk to him prior to going back to England. He took his sister with him on this trip in order to get her away from her home and children, and to give her a little outing. Fuchs believed they traveled at least part of the way by plane in order that she might have this experience. Fuchs said that this trip was not connected with his espionage activity. (S) U

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FUCH'S SUBSEQUENT ESPIONAGE ACTIVITIES IN ENGLAND (S) U

Fuchs advised that in September, 1945, in Los Alamos his contact, Raymond, gave him instructions for the carrying out of a meeting in England in view of the fact that Fuchs at that time believed that he would be returning to England around the first of the year, 1946. Fuchs himself actually designated the meeting place in view of the fact that Raymond did not know anything about England. Fuchs was to carry a copy of Life at this meeting and his contact was to have a bundle of books. Actually Fuchs never utilized this method of reestablishing contact with the Soviet Intelligence Service in England because of the exposures which had been made public in connection with the Soviet Intelligence network in Canada. He, after his return to Harwell, England, in July, 1946, saw certain excerpts there regarding the espionage activities of Alan Nun May, the British scientist, and this made him fearful of utilizing the contact although he did not actually believe he would be involved because he had not engaged in espionage in Canada. (S) U

Late in 1946 he decided to utilize some other method of reestablishing contact with the Soviet Intelligence Service and he therefore decided to attempt to recontact Jurgen Kuczynski but learned that Kuczynski had returned to Germany. He, therefore, contacted Johanna Klopstech who he knew to be active in connection with an underground section of the German Communist Party and Fuchs stated he had known her prior to the time that he went to the United States. He contacted her at her home and told her that he had "lost contact." He asked her to get in contact with whoever had taken Kuczynski's place in England and give them the message but he did not explain further. A week or so later he contacted Johanna Klopstech just outside or inside the gate at Hampton Court and she at that time gave him instructions as to how he would reestablish contact for espionage purposes. This included a password and recognition signals and the contact was to have a red book in his hand while Fuchs was to carry a copy of "Tribune." They were to meet at the Nagshead Pub in Woodgreen, London, England, and the recognition signals included the contact making some remark concerning a drink and Fuchs making the suitable reply. Fuchs believes that early in 1947 he actually reestablished contact with an individual, whose name he did not know, at the Nagshead Pub and at the first meeting with this man nothing was passed. The new espionage contact reprimanded Fuchs for utilizing Johanna Klopstech, a Communist, in reestablishing contact with the Soviet Espionage Services. From early 1947 until February or March of 1949 Fuchs carried out approximately six contacts with this new espionage superior and the contacts were spaced at approximately two-month intervals; however, Fuchs says that he missed a large number of these contacts. He said that there were two points for the meeting places after the first meeting and that they alternated between the two spots, one of them being at the Spotted Horse Pub on High Street in London, England, and the other was outside of an underground station in Kew Gardens, London, England. Fuchs said that he believes that he only delivered one or two actual reports to this contact which he had taken from his official position in con-

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nection with the Atomic Energy Research Plant at Harwell, England. He did furnish to the contact information relating to atomic energy research, including the following: the mechanics of assembly; he filled in the details on pre-detonation as he had learned it in the United States. He believes that he furnished calculations from the two atomic bomb explosions in Japan, although Fuchs commented that his calculations based on this were not the officially accepted calculations. He was once asked about the electromagnetic process and the efficiency formula. (S) U

Fuchs said that in delivering material to this espionage contact, the individual would usually disappear for a few minutes and then come back, which indicated to Fuchs that he was passing on the reports to someone else. Fuchs said that in meeting this individual in pubs, he would usually go in and sit down and order his drink and a short time later he would see the contact in the pub and Fuchs would wait until the man then left and would shortly thereafter follow him out on the street where the contact would be actually established. (S) U

Fuchs said that in either 1947 or 1948 he accepted 100 pounds in English money from his contact. Fuchs said that he was motivated in doing this by the fact that security precautions had been tightened up after the exposures in Canada and he felt that in accepting this money he was more or less assuring his contact of his loyalty. Fuchs also said that he may have accepted a pound or two in English money at various other times in order to meet his expenses for travel but that he did not accept any presents or gifts. (S) U

Fuchs stated that in 1948 it was suggested to him that he contact an individual by the name of Sukhonlin at 2 Rue Adolphi Bartholdi in Paris, France. He was told that this individual would be able to place him in contact with someone who would be able more fully to understand scientific terms. Fuchs said that he never established contact with Sukhonlin (actually Vassili V. Soukhomline) in view of the restrictions placed on sterling for use in foreign travel at about that time. (S) U

Arrangements were also made in order that Fuchs might establish contact with his intermediary in case the other arrangements broke down by going to a particular address at 166 Kew Road in Richmond, Surrey, England. At this point Fuchs was to throw a copy of the periodical "Men Only" over the wall of a house. On the tenth page of this periodical Fuchs was to write instructions for the next meeting. Fuchs was then to go to another point and to make a chalk mark on a wall. Fuchs utilized this method of contact on only one occasion which was merely for the purpose of testing the arrangement and he did not place any instruction on the tenth page of the periodical. His contact at a later meeting informed Fuchs that the proposed method of establishing contact had worked. [It might be noted at this point that] (S) U

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Fuchs said that he finally stopped attending meetings with his contact and that no attempt was made to again activate him in Soviet Espionage. He also said that his contact may have known that he was dissatisfied because he missed so many meetings and also had not been furnishing all the information which was requested. (S) U

Fuchs furnished the following description of his last espionage contact in England:

Name: Not known.
Age: About 30.
Height: 5'6" or 7"
Weight: 160 - 170#
Eyes: No recollection.
Build: Stocky figure.
Hair: Dark blond, combed back and believed parted.
Features: Fairly round face.
Nose: Short nose.
Lips: Neither thin nor thick.
Glasses: No.
Teeth: No recollection.
Nationality: Fuchs said he could have been a Russian but he is not sure of this.
Accent: Had slight accent. Fuchs not able to identify.
Occupation: Does not know.
Habits: Drank beer but did not smoke.
Personality: Friendly but somewhat reserved.
Scientific Background: None
Dress: Well dressed.

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FUCHS' VISIT TO USA IN 1947 (S) U

Fuchs advised that during November, 1947, he traveled to the United States by plane, arriving in New York City. He stayed a day or two in New York City at a hotel, the name of which he did not recall, but which was in upper Manhattan, just off Broadway, and he believed that it was on a street two or three blocks above 111th Street. He recalled 111th Street in view of the fact that he remembered that Mrs. H. W. B. Skinner was residing in an apartment on that street. (S) U

Fuchs then went to Washington, D.C., where he attended a declassification conference in company with other British scientists. He said that this conference lasted three or four days, and he saw there a number of American scientists with whom he had worked at Los Alamos. He said that following this conference, he traveled back to New York City and then went to Ithaca, New York. At Ithaca he visited Cornell University, where he talked to Dr. Bethe, a Mr. Wilson, Phillip Morrison, and Richard P. Feynman. His conversations with these individuals were in regard to work being done by them in nuclear studies at Cornell. (S) U

Fuchs then traveled to Rochester, New York, where he was in contact with Robert Marshak, whom he had known at Los Alamos. He said that he arrived in Rochester in the late afternoon, and recalls being shown a cyclotron by Dr. Marshak. Fuchs then went to Chicago, where he spent two days at the Argonne National Laboratory, and he recalls being in contact with Dr. Zimm there. Fuchs said that specific permission had been obtained for a visit to the Argonne National Laboratories, and his access to information there was limited to some extent. While in Chicago, Fuchs said that he saw Mrs. Edward Teller, but does not believe that he saw Edward Teller who had just left Chicago. He said that on one evening Mrs. Teller invited some people in to see him, but he does not recall the names. He does recall seeing Mr. and Mrs. Ronald Wilfred Gurney while in Chicago. (S) U

After leaving Chicago he went to Schenectady, New York, where he spent one or two days at the General Electric plant. He said that he conferred with a number of persons, including Dr. Flückiger and Mr. Pollock. He said that he was shown the betatron and the synchrotron. Fuchs said that he had several informal discussions there and gave a short, informal lecture on certain work being done at Harwell. (S) U

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Fuchs then traveled to Cambridge, Massachusetts, where he spent three days with his sister, Kristel Heineman. He does not recall discussing with her anything concerning his contact, "Raymond," who may have been known to her by the name of "Joseph" or "Jack." He said that during the time he was there his sister may have entertained once or twice in his honor, but he does not recall this with any certainty. He believes that Robert Heineman was present at this time. Fuchs also went to the Massachusetts Institute of Technology during the time he was in Cambridge, at which time there was some discussion on experiments with regard to prospecting for oil with neutrons. He recalls seeing Dr. Weiskopf there and also saw Martin Deutsch. He then traveled back to New York City and caught a plane back to London, England.

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CLOSE ACQUAINTANCES AND ASSOCIATES OF FUCHS IN THE U.S.A. (S) U

Fuchs was questioned regarding certain close acquaintances and associates in the United States, and while he had expressed initially a reluctance to furnish information regarding such persons, he did give certain information regarding those persons. He specifically stated that none of the following people were in any way involved in his espionage activities while he was in the United States. (S) U

1. Hans A. Bethe (S) U

Fuchs said that Dr. Bethe had been the head of the Theoretical Division at Los Alamos, and he had worked under him. He said that he visited Dr. Bethe in June of 1946, and in November of 1947, at Cornell University. (S) U

2. Earl Paley Cohen (S) U

Fuchs said that he had known Dr. Cohen during the period that Fuchs was attached to the British Mission in New York City. Fuchs also said that when he was in the United States in November, 1947, he saw Dr. Cohen at a restaurant in New York City. Fuchs said that he left his hat in the restaurant, and later requested that Cohen pick up the hat and return it to the home of Mrs. E. W. B. Skinner, West 111th Street in New York City. Fuchs said that this incident did not have anything to do with his espionage activities. (S) U

3. Richard Phillips Feynman (S) U

Fuchs said that he knew Mr. Feynman at Los Alamos, and also saw him in November, 1947 at Cornell University in Ithaca, New York. He did not know of any espionage or Communist activities on the part of Mr. Feynman. (S) U

4. Victor Weiskopf (S) U

Fuchs said that he knew Weiskopf at Los Alamos, and also saw him in 1947, when Fuchs visited MIT in Cambridge, Massachusetts. He knew of no Communist or espionage activities on the part of Weiskopf. (S) U

5. Martin Deutsch (S) U

Fuchs said that he knew Deutsch at Los Alamos, and also saw him in November, 1947, at MIT. He said that Deutsch may also have visited Kristel Heineman's home in Cambridge during that time. Fuchs also knew Susie Deutsch, the wife of Martin Deutsch. He knew of no Communist or espionage activities on the part of Mr. or Mrs. Deutsch. (S) U

6. Manson S. Benedict (S) U

Fuchs had known Benedict during the period he was in New York City attached to the British Mission there. He did not know of any Communist or espionage activities on the part of Benedict. (S) U

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7. Taney Elton Royle Skyrms](S)U

Fuchs knew Skyrms when they were both attached to the British Mission during 1944 in New York City. Fuchs said that he knew of no Communist or espionage activities on the part of Skyrms. (S)U

8. Evelyn Jones Kline](S)U

Fuchs said that he had known Evelyn Kline at Los Alamos, and that he also had dated her on a few occasions. He did not know of any Communist or espionage activities on her part. (S)U

9. Christopher Frank Kearton](S)U

Fuchs said that he had known Kearton when they were both attached to the British Mission, and at one time Kearton had been in charge of the Mission. He did not know of any espionage or Communist activities on the part of Kearton. (S)U

10. Professor Albert Einstein](S)U

Fuchs said that he had never met Professor Einstein. He said that he knew of no activity on the part of Einstein in his behalf. He knew of no Communist or espionage activities on the part of Einstein. (S)U

11. J. Robert Oppenheimer](S)U

Fuchs knew Oppenheimer during the time that Oppenheimer was one of the leading officials at Los Alamos. He knew of no Communist or espionage activities on the part of Oppenheimer. (S)U

12. Dr. George Flaczek](S)U

Fuchs knew Dr. Flaczek at Los Alamos, and also saw him in November, 1947 at the General Electric plant in Schenectady, New York. He knew of no Communist or espionage activities on the part of Flaczek. (S)U

13. Dr. Robert E. Marshak](S)U

Fuchs became acquainted with Dr. Marshak at Los Alamos, and in November, 1947, visited Dr. Marshak in the Physics Department at the University of Rochester. He did not know of any activities on the part of Marshak concerning Communist or espionage matters. (S)U

14. Robert Brode](S)U

Fuchs said that he had known Dr. Brode at Los Alamos, and was quite friendly with him. He did not know of any Communist or espionage activities on the part of this individual. (S)U

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15. Dr. Edward Teller (S) U

Fuchs said that he became acquainted with Dr. and Mrs. Edward Teller at Los Alamos, and was very friendly with both of them. He said that he also saw Mrs. Teller in Chicago in November, 1947. Fuchs stated that he knew of no Communist or espionage activities on the part of either Dr. Teller or Mrs. Teller. (S) U

16. Otto Freisch (S) U

Fuchs said that Mr. Freisch was one of his better friends at Los Alamos, where Freisch was also a part of the British Mission. He did not know of any Communist or espionage activities on the part of this individual. (S) U

17. Professor Rudolph R. Peierls (S) U

Fuchs said that he had worked with Professor Peierls at Birmingham, England, and had then come to the United States in December, 1943 as an assistant to Professor Peierls. He later worked under Peierls at Los Alamos, and has also seen quite a lot of Peierls since Fuchs returned to England. He knew of no Communist or espionage activities on the part of Peierls. (S) U

18. Ronald Wilfred Gurney (S) U

Fuchs said that he became acquainted with Mr. Ronald Gurney and his wife, Natalie, in Bristol, England, in about 1933, and was closely acquainted with them until at least 1937. He said that he also met the Gurneys in Chicago, Illinois, in November of 1947. He said that consideration had been given for the employment of Dr. Gurney at Harwell, England, on the Atomic Energy Research Plant there. Fuchs said that he would regard Dr. Gurney as a security risk. He based this on the fact that Gurney and his wife had both belonged to the Society for Cultural Relations with the Union of Soviet Socialist Republics in Bristol during the 1930's. Fuchs himself had attended meetings of this organization, and knew that Mrs. Gurney was particularly active in the organization. Fuchs regards the Society for Cultural Relations with the Union of Soviet Socialist Republics as a Communist front organization. Fuchs said that his statement that he would regard Dr. Gurney as a security risk may have been somewhat prejudiced because Gurney was turned down for employment at Harwell, England, for work on the Atomic Energy Research Plant there. Fuchs believes that the question of loyalty possibly entered into this rejection of Dr. Gurney, but he does not know that this is absolutely a fact. He said that the question of the loyalty of Dr. Gurney did not trouble him so much as the loyalty of Mrs. Gurney. He explained this by saying that he did not know of any espionage activity on her part, and did not know if she would actually engage in such activity, but he believed that other people might get in contact with Soviet espionage through her. He also said that she was not sufficiently discreet. (S) U

RELATIONSHIP WITH ISRAEL HALPERIN] (S) U

Fuchs maintained that he never had any espionage dealings or affiliations directly or indirectly with Halperin, and that while in the United States, the only espionage activities in which he participated were with Raymond (Harry Gold). He stated that he received a letter, as best he could recall, from Halperin who had heard that he was in a detention camp in Canada. There are two possibilities as to the way that Halperin might have learned of Fuchs' presence there. One, it is possible that he learned this information from Mrs. Kristel Heineman, Fuchs' sister, who was aware of the fact that Fuchs was in Canada. On the other hand, it may be that German Communist Party members in England wrote to Israel Halperin to look after the scientists who were incarcerated in Canada, and probably furnished Fuchs' name among the others. This he feels is quite likely, particularly since Fuchs was classified as a German Communist Party member. The letter which he received from Halperin stated that Halperin was going to send Fuchs some scientific articles or magazines, and he asked particularly if he could do anything else for Fuchs. Shortly thereafter, Fuchs stated he received two copies of magazines, one, "Physical Review" and the other "Modern Physics," which came to him from Halperin while in the detention camp. He received no newspapers, and he stated there was no significance to the publications other than that they were scientific publications of the type that Fuchs would be interested in reading. It is entirely possible, Fuchs stated, that he wrote a letter to Halperin expressing his thanks. He does not remember specifically such a letter, but he thinks it is very likely as it was the logical thing to do. (S) U

While in Detention Camp N in Canada, some of the detainees were released under certain considerations, one of those being that the person released was a scientist. Fuchs is not certain how it happened that he was personally released, but he knew some people in England who might like to effect his release. He did feel fairly certain that Professor Max Horne, first at Cambridge and later at Edinburgh Universities, would like to effect Fuchs' release as a fellow scientist, as would others who were members of the Party. (S) U

He stated that he knew Wendell Furry by name. He believes that he has met Furry, who possibly called at Mrs. Heineman's home when Fuchs was visiting his sister's home at Cambridge. Some scientists from the University did visit there, and his sister and brother-in-law, Robert Heineman, knew several scientists at the University. Fuchs stated positively that he did not know that Wendell Furry was a brother-in-law of Israel Halperin. He states further that he did not know that Furry was a member of the Henry Thoreau Professional Branch of the Communist Party, or the Joint Anti-Fascist Refugee Committee, or the Civil Rights Congress, or the St. Adams School for Social Studies. He also did not know that Furry's wife, Elizabeth, was a member of the Cambridge Branch of the Communist Party. He stated he had no reason to suspect Wendell Furry of being engaged in any espionage activities of any type whatsoever. (S) U

Fuchs stated that his contacts and relationships, as above described, which is the full extent of them as best he could remember, had nothing whatsoever to do with espionage activities. (S) U

[MISCELLANEOUS] (S) U

1. Fuchs stated that he engaged in no Communist Party activities at any time while in the United States. He advised that he knew of no other scientist engaged in espionage or Communist Party work while he was in the USA. He stated he never talked to Dr. Pelerls about his Communist or espionage activities, and Dr. Pelerls did not know about Fuchs' Communist activities, in England prior to coming to the United States. He advised that some people may have thought that Fuchs was a Communist, but no one knew it definitely. He stated repeatedly that he knew of no one who was engaged in espionage activities in the United States at any time other than himself and his contact, "Raymond" (Harry Gold). (S) U

2. Fuchs stated he engaged in no espionage activity in the United States except as above-described in his dealings with "Raymond" (Harry Gold). (S) U

3. When Fuchs was informed that Harry Gold had indicated that he was passing the information obtained from Fuchs to another agent by the name of "John," Fuchs, after reflection, stated that he had thought the matter over and there were several possibilities. He stated, after being asked if he could give any information which might in any way lead to an identification of "John," that there was a possibility that Gold was lying. Another possibility was that in connection with the charge made by Gold that a telephone number had been left for Fuchs to use in making a contact in New York, he had no recollection of this incident whatsoever and it would be a strange thing in his life, and it would be unusual for him not to remember such an unusual event, but he could not absolutely reject the possibility that something of the sort might have happened, although he has no recollection of it. He stated that someone could have been assigned to keep the house of his sister under surveillance at Christmas, 1944, and in February, 1945, in the expectation that he might call there, and when he did, call at her home, they might advise Gold he was there, but he had no information or indication to the effect that this was so. Other possibilities that he had in mind would include Konstantin Lafazanov and also his sister's cook, since they were frequently at his sister's home, but he had no reason to suspect them. (S) U

He said that the possibility of the scientist Wendell Furry being involved was not outside the realm of possibility since he believes he met Furry at his sister's home, but he does not have any information indicating that Furry was in any way involved. He failed to remember the names of any of the friends of his sister or brother-in-law while he was there. He does (S) U

recall that he visited the school where his nephew was attending and that someone there might have been the contact and notified Gold that he was in Cambridge. He also stated that we, as investigators, could bear in mind the possibility that Fuchs was lying, but that, of course, he was not. He stated that he could not furnish any information that would in any way assist in determining to whom Gold was furnishing the information. (S) U

4. Fuchs advised that all of the espionage activities engaged in by him, both in the United States, as heretofore described, and in England, were for the specific purpose of aiding and benefiting the Soviet Union in their research, development and construction of the atom bomb. His contact, "Raymond," he considered to be an intermediary agent who was passing the information along so that it could reach the Soviet Union, and that this was at all times Fuchs' intention and desire while engaged in such activities. (S) U

5. Fuchs stated that very few questions were ever asked of him to indicate what the Russians wanted, and when the questions were asked they were general, such as furnishing information concerning the electromagnetic process, and these questions would not and did not indicate the progress which the Russians had made or were making in the development of the atom bomb. Other questions which were asked of him, always orally, had to do with personalities employed at Los Alamos or New York, and these personalities were usually the outstanding scientists about whom inquiry was being made. (S) U

6. He stated in explanation of the fact that his name and his brother's name were on German subversive or police records, that he, Fuchs, while in Germany and while attending the university, was head of a student corps which was anti-Fascist and pro-Communist, and this group, including Fuchs particularly, was very much disliked by the Nazis, and the situation became critical and it was necessary for him to go underground — so of course the Germans had his name as well as his brother's name. (S) U

7. Visits to Washington. Fuchs was asked whether he had ever visited Washington, D.C., for espionage purposes, and he stated that he had not. He was asked if he knew whether Gold ever had traveled to Washington, D.C., for the purpose of making an espionage contact, and Fuchs again replied in the negative. (S) U

Fuchs was then asked whether he knew Phillip Graham, the Editor of the Washington Post newspaper, and he said that he did not. He also said that he never had heard of Mr. Herbert Elliston, an editorial writer for the

Washington Post. Fuchs said that he did know of the newspaper, the Washington Post, because while in England, before coming to America, he had read in the Washington Post of the political negotiations between England and the United States which led to the British Mission being sent to America to assist and cooperate to a limited extent in the atomic research field. He stated that as far as he knew the Washington Post thus had a scoop on this story. Fuchs said that his only visits to Washington, D.C., were in December, 1943, when he arrived in the United States and stopped overnight in Washington. In July, 1944, he traveled to Washington and contacted Sir James Chadwick of the British Atomic Mission, and one occasion while at Los Alamos he flew to Washington in an Army bomber. He also was in Washington, D.C., in June, 1946, when he was en route back to England. He also visited Washington, D.C., in November, 1947, for a four-day conference with respect to declassification. (S) U

6. Inquiry was made of Fuchs as to whether there was anyone that he met while in the United States that he might suspect of being engaged in espionage activities, or who could be interpreted as a security hazard. He stated that he wanted to think about this matter, and he thought of it overnight, and then replied that he saw no action, had heard of nothing which was said, and knew of nothing which was done by anyone which would have given rise to a suspicion in his mind that anyone he knew or saw was a security hazard. The only thing approaching it was that he remembered that once he met a young person at Los Alamos whose name he does not know, and he had a feeling that this individual was the kind of person who might do such a thing. This was purely intuitive and he saw this person only on one occasion and said to himself that he should attempt to keep away from him. He could give no description of this individual except that he was younger than Fuchs, and Fuchs believed him to be a physicist, and the only thing that he could say that created this intuitive feeling that he might be a security hazard was his appearance. (S) U

He advised that in his own case, the only likelihood of detection that he could see would be for someone to analyze his Communist activities with his previous history. They would find that he was acting completely out of character with his previous history. By this he meant that he was an active anti-Fascist and Communist in Germany. He also was engaged in Communist activities, including giving assistance in the transmission of pamphlets from Scotland to Germany, and while in the United States he engaged in no activities of this sort which placed him out of character. This, he felt, was his most vulnerable point while here, and a close study would have found him operating "out of character." (S) U

Fuchs was of the opinion that the usual stereotyped kind of intellectual would not engage in espionage activities, but the sort of person to look for, in his opinion, would be one who was different from the stereotyped intellectual, and this would be the only lead he could give for the young man in Los Alamos, since he did not measure up to the usual stereotyped intellectual that Fuchs knew. (S) u

He stated positively that he knew of no other information of any type or kind which he believed to be of any assistance whatsoever, in connection with the development of information concerning espionage or security hazards as far as the United States was concerned, and that he had made a full disclosure, and he believed that everything he knew he had said, and that he was glad to be of the assistance he had been because it permitted him, in some small way, to make recompense. (S) u

9.

Description of Fuchs

Date of Birth	December 29, 1911
Place of Birth	Russelsheim, Germany
Citizenship	British citizen by naturalization
Occupation	Research physicist
Height	5' 10-1/2"
Build	Thin
Complexion	Dark and sallow
Hair	Brown, decidedly balding and receding at temples. A few occasional gray hairs in temple area.
Eyes	Brown - wears glasses
Features	Medium high forehead which is given to wrinkling when in thought or study. Clean-shaven. Has noticeable vein running from eye level across temple to the level of the hairline.
Teeth	Regular and dark; the second, upper tooth, right from the center, was quite dark.
Speech	Soft voice. Speaks English fluently, with some German accent.
Characteristics	Has noticeable protruding adam's apple. Swallows hard, frequently, and audibly-- particularly when under pressure; smokes cigarettes; fingers somewhat

Characteristics
(Continued)

long; hands rosy -- especially at
knuckles; wrists fairly wide in
proportion to hands; bats eyes with
somewhat above-average frequency;
slightly stoop-shouldered

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ENCLOSURES (S)U

1. Two rolls of movie film (See page 5). (Enclosures to original only.) (S)U
2. Two photographs of Harry Gold identified in Fuchs' handwriting (See page 5). (S)U
3. Hagstrom's maps of Manhattan, Brooklyn and Queens examined by Fuchs in locating meeting places with Gold (See pages 11, 14 and 15. Maps as enclosures with original of report only). (S)U
4. Sketch of A-Bomb drawn by Fuchs on May 31, 1950 and believed by him to be similar to the sketch which he passed to Gold at Santa Fe, New Mexico in June 1945 (pages 24 and 32). (S)U
5. A signed form on which is listed a number of reports prepared by Fuchs. Fuchs filled out this form in his own handwriting indicating whether he passed the document or any copy of it or excerpt from it to a Soviet espionage agent. Any affirmative answer is followed by an indication of the place where it was delivered by Fuchs to the espionage agent and then followed by Fuchs' autographic initials. Of course, those documents delivered outside the USA were not delivered to Gold (Raymond), but he intended to signify that the document or excerpt was passed by him to a Soviet espionage agent. (S)U
6. A 10-page signed statement of Fuchs admitting his various espionage activities and including technical classified data. (S)U
7. A 7-page signed statement of Fuchs similar to the above, but omitting classified data. (S)U
8. Photograph of Fuchs at the age of 16 or 17 years and another photograph at the age of about 20 years [as furnished by British Security Service.] (S)U
9. Photograph of Fuchs taken in 1943 [as furnished by British Security Service.] (S)U

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HEREIN IS UNCLASSIFIED
DATE 02/17/96 BY SP6AC/JS
FOIA 56261
C#75-1121

Wormwood Scrubs Prison
London, England (S)U

I, Emil Julius Klaus Fuchs, a prisoner in Wormwood Scrubs, a penal institution in London, England, do hereby make this statement, freely and voluntarily, with no promises or threats having been made to me, and I have been specifically informed that I do not have to make any statement of any kind whatsoever. (S)U

This statement is made to Hugh H. Clegg, who has been identified to me as an Assistant Director, and to Robert J. Lamphere, who has been identified to me as a Special Agent, both being identified as officers of the Federal Bureau of Investigation, United States Department of Justice of Washington, District of Columbia, U.S.A. I am making this statement in the presence of the two aforesaid officers and William James Skardon, whom I know to be an officer of the Security Service of the United Kingdom. (S)U (4)

I was born in Russelsheim, Germany, on December 29, 1911, and became a naturalized citizen of the United Kingdom on August 7, 1942. I came to England arriving on September 24, 1933. In May, 1941, I accepted employment at the University of Birmingham in England as a scientist on atomic energy research development. When I learned of the purpose of this research work, I decided and planned to furnish information concerning this work to and for the benefit of the Union of Soviet Socialist Republics, hereinafter referred to as the Soviet Union, and, in order to effectuate this plan, in early 1942 I personally contacted an individual in England, whom I knew to be active in communistic affairs/favorable to the Soviet Union. I made known to him my availability and readiness to furnish confidential and classified information and my occupational affiliation which gave me access to such types of information relating to atomic energy research. The person so contacted arranged for me to meet another individual, also in England, whom I later personally met in 1942. On one occasion in 1942 I met this latter individual, known to me as Alexander, at the Soviet Embassy in London, England. During my meetings with Alexander, I furnished to him in 1942 information including written data concerning atomic energy research which I knew to be classified and confidential, and for the purpose of such information being furnished to the Soviet Union as an aid in promoting atomic energy research and

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Klaus Fuchs

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- 1 -
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development in and for the Soviet Union. Through and at the instigation of Alexander, I established personal contact with a woman whose name I do not know and whom I met near Banbury in Oxfordshire, England, sometime in 1942. I delivered confidential and restricted information to this woman, for the continued benefit of the Soviet Union, from 1942 until near the end of 1943. My atomic energy research employment was under the auspices of the British Government. (S)U

When I learned in 1943 that I was being officially assigned to go to the United States as a part of an official British Mission to work with the Manhattan Engineer District on atomic energy research development, I informed my contact, the aforesaid woman, of this assignment and she subsequently informed me how to make contact in the United States with an individual for the purpose of continuing my activities of furnishing, for the benefit of the Soviet Union, additional confidential information relative to atomic energy research in the United States. Her instructions were to the effect that I should on a certain day at a specified place in New York City, New York, U. S. A., meet an individual who would be wearing gloves and would have an additional pair of gloves in his hands, while I would have a ball in my own hand. This meeting was, according to her instructions, to be made on a street in New York City at a stated time. If the meeting was not effected initially as planned, a further meeting would be attempted at a designated later date. (S)U

In keeping with instructions, I proceeded by ship to the United States with other members of the official Mission from England, arriving at Newport News, Virginia, on December 3, 1943. Within three or four days I arrived in New York City, taking up residence first at the Taft Hotel, later at the Barbizon Plaza Hotel, and later at an apartment at 128 West 77th Street. I took up employment as a scientific consultant as a part of the British Mission, assigned to the Manhattan Engineer District, and engaged in research development and activities relating to atomic energy. (S)U

As agreed upon during the meeting with the aforementioned woman in England, I went to the designated meeting place on the lower East Side,

Klaus Fuchs (S)U

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Manhattan, New York City, New York, where, to the best of my recollection, around Christmas 1943, I met an individual at the time and on the day previously agreed upon. He was wearing gloves and carried an additional pair of gloves in his hand and I had a tennis ball in my hand. We exchanged designated identification words and I gave my correct name and he used the name of Raymond in making initial introductions. Raymond expressed his pleasure at being chosen for such an important assignment. He suggested to me to make certain, in keeping future meeting assignments, that I was not being followed. During this or the next succeeding meeting with Raymond, atomic energy and the development of an atomic bomb were discussed by referring to these terms in a general way. (S)U

I was motivated in keeping this meeting by a desire to aid the Soviet Union. I considered Raymond's status as an agent intermediary, acting for and in behalf of the Soviet Union in keeping with the plans aforementioned, which were initiated in England. (S)U

At and during this first meeting with Raymond in New York City, we agreed upon an early subsequent meeting and the time and place for such meeting, in order that I could furnish to Raymond highly confidential and classified documents or information concerning atomic energy research and development under the control of the Manhattan Engineer District. (S)U

A subsequent meeting between Raymond and myself, in keeping with arrangements, was held in Manhattan, New York City, in the vicinity of the Queensboro Bridge approach as we walked under this bridge during this meeting, which was held after dark. This meeting occurred during the early part of 1944. (S)U

On another occasion during the first half of 1944, I met Raymond, by prearranged agreement between us, on the street near a subway station, possibly the "Museum" station on Central Park West in New York City. Raymond usually suggested the meeting places, but I believe I suggested this meeting place because it was near my place of residence on 77th Street. (S)U

Another time, by prearranged agreement, in 1944 I met Raymond in the Bronx, New York City. This meeting was near a cinema, I believe,

Klaus Fuchs

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on Grand Concourse in the vicinity of 159th Street or 161st Street. (S)U

I believe I recall another personal contact between Raymond and myself in Queens, New York City, in 1944. (S)U

There were held about five or six meetings between Raymond and myself in New York City during the period from sometime shortly after my arrival there in December, 1943, to sometime prior to my departure in August, 1944, from New York City for Los Alamos, New Mexico, for official assignment on the atomic energy project there. (S)U

There was one other arrangement for my meeting with Raymond in 1944 in Brooklyn, New York, on a street location near some large buildings and where there was heavy traffic. This designated place may be on Eastern Parkway, but the meeting did not occur as I failed to see Raymond, although I was there. (S)U

At all the meetings between myself and Raymond no other person accompanied me and I observed no one who seemed to know Raymond. Most of these meetings between Raymond and myself were arranged by us to occur after dark. (S)U

Upon my official assignment with members of the British Mission, on work under the overall control of the Manhattan Engineer District in New York, I, with other scientists, was engaged in a study of the principle of gaseous diffusion related to the development of the production of materials to be used in a proposed detonation of fissionable material. (S)U

I, with other scientists, prepared certain highly confidential and classified documents relating to our official assignment and referred to as the MSN Series of documents. There was a total of approximately nineteen such MSN documents prepared prior to my departure for Los Alamos, New Mexico, in August, 1944. I personally prepared about thirteen of these documents. In the process of the preparation of those MSN documents written by me, I would first prepare a draft, then on some occasions they would be sent to my immediate superior for reading, then, in turn, would be routed for duplication. In most instances, however, I would route the draft, which I prepared, directly for duplication. In all instances, when I prepared

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a proof copy K.F.
the draft, ~~the duplicated copies~~ and the original draft would be returned to me. ~~I would number~~ Each of the duplicated copies for control and *(copy numbered K.F.)* security purposes, due to the highly confidential character of the contents. I would personally retain the original draft, which most of the time I had prepared in longhand, and I personally furnished all of the drafts of my own composition directly to the individual known to me as Raymond, with the intent and purpose that he serve as an intermediary in the eventual transmittal of such secret documents to and for the benefit of the Soviet Union. These documents were at times folded and at other times in package form and were delivered personally by me in groups of one or more at most of the aforementioned prearranged meetings, after the initial contact meeting which I had covertly with Raymond in New York City during 1944. *(S) U*

Also during my meetings with Raymond, as above mentioned, in New York City between December, 1943, and August, 1944, I furnished to Raymond confidential, classified official information, which had come to my knowledge by virtue of my official employment on work under the overall control of the Manhattan Engineer District, as follows: Oral information that there was to be built somewhere in the Southeastern part of the United States a large production plant or establishment to be engaged in the production of fissionable material, utilizing the gaseous diffusion process and the electro-magnetic process in such production; oral information as to officers and identities of leading research personnel as known to me at the gaseous diffusion research establishments under the Manhattan Engineer District in New York; information in writing, from time to time during these meetings between myself and Raymond, concerning the overall and general effort and activities already made and then being made, as this knowledge became known to me in connection with my own work, relative to the production of fissionable material and its potential use as an explosive in the war effort; general information in writing about the membranes and their composition, and, although I did not know the technical details, the general information was official, confidential and classified. *(S) U*

In keeping with official instructions received by me, I was transferred to Los Alamos, New Mexico, where I arrived on or about August 14, 1944, for work on the atomic energy project there under the control and overall supervision of the Manhattan Engineer District. At Los Alamos I was provided a place of residence on the United States Government restricted area in a dormitory and took up employment as a physicist in the Theoretical Division

Klaus Fuchs

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of the Laboratory. By virtue of my work, my associations in connection with my work and the availability of confidential and classified official documents, I developed, received and had access to confidential, classified information of an official character. My work while in Los Alamos was concerned with a certain highly classified aspect of the method of detonation, various implosion designs, the theory of the jets in connection with implosion, and similar confidential work as an expert physicist. I remained in such employment at Los Alamos until about June 16, 1946. During this period of official employment I made a visit to the home of my sister, Mrs. Kristel Heineman, and her husband, Robert Heineman, on Lakeview Avenue, Cambridge, Massachusetts. I arrived at my sister's home on or about February 13, 1945, and remained there on a visit until about February 22, 1945. While there, and shortly after my arrival, I was visited by the aforementioned individual known to me as Raymond. Raymond met me in my sister's residence and there was a brief visit. He asked for additional up-to-date information and I told him I would prepare in writing details of bomb construction and other technical details of this research work. I knew from my previous conversations with Raymond that he was not qualified to understand most of the technical information which I possessed, so I agreed to prepare a written statement containing such information. Within a few days thereafter, by prearrangement and agreement made at the home of my sister as to time and place of meeting, I did meet Raymond in Boston, Massachusetts, at a place fairly near the Charles River and near a large public-type of building, reasonably close to what is known as North Station. There and then I delivered to the individual Raymond a written statement, which I had prepared in longhand and consisting of about six or more pages, in which I had set forth confidential and classified information and data dealing with the whole problem of making an atomic bomb from fissionable material as I then knew the problem and the agreed upon, as well as prospective, plans as then known to me. There was in this same document, written by me and delivered by me to Raymond, information as to the principle of the method of detonation of an atomic bomb; some information known to me as to the type of core; the principle of the lens system, which had not yet at that time finally been adopted; the size as to outer dimension of the high explosive component; the possibility of making a plutonium bomb; most of the information which was then known as to implosion; the fact that a high explosive as a type of compression was considered, but not entirely decided on; the difficulties of multiple point detonation as this was a problem on which I was working;

These arrangements were made without the knowledge of my sister and her husband, who were not present and during my discussion with Raymond and had no knowledge of its purpose.

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Klaus Fuchs

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the highly spontaneous fission rate of plutonium 240; the comparative critical mass of plutonium as compared with uranium 235; the approximate amount of plutonium necessary for such a bomb; the current ideas as to the need for an initiator. I wrote this statement in English and in technical language, which, I believed, could be understood by advanced physicists in the Soviet Union, for whose use and purpose I prepared this paper. (S) U

During this covert meeting between Raymond and myself in Boston in February, 1945, we made an agreement and arrangements for a meeting between us to be had in June, 1945 at Santa Fe, New Mexico. (S) U

I returned to my work at Los Alamos, New Mexico, arriving there on or about February 25, 1945. In keeping with the aforementioned agreement and plan made in Boston, I met Raymond in Santa Fe, New Mexico, in June, 1945. This was a short time before the Trinity explosion test. Raymond indicated that, due to his other employment, he had difficulty in finding an opportunity to come to Santa Fe. We met, as per arrangements, on Alameda Street where it lies alongside the river. Adjacent to this street is a number of trees and benches. I went for the car I was using, picked up Raymond and we drove across the river bridge, turned into a lane which ended at a gate in an isolated place, and there we continued our meeting. I delivered to Raymond confidential and classified written information in a paper or document, which I had personally written in longhand. Included in this written paper were the following items of confidential, classified information: A full description of the plutonium bomb, which had been designed and was soon planned to be tested at Alamogordo; a sketch of the bomb and its components with important dimensions indicated; the type of core; a description of the initiator; details as to the temper; IBM calculations; and the method of calculating efficiency. I orally informed Raymond, while we were in the car at the time and place indicated, the names of the types of explosives to be used in the bomb; the fact that the Trinity test explosion was to be made, with the approximate site indicated, soon in July, 1945, and that this test was expected to establish that the atom bomb would produce an explosion vastly greater than TNT and the comparative estimated force of this explosion was indicated in detail with relation to TNT. All of the information given and delivered by me to the individual known to me as Raymond, as above set forth, both orally and in writing and in the form of a sketch, was known by me to be highly confidential and classified and pertained to the principle, production, calculated effectiveness, testing

the principle of the N.F.

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and the development of an atom bomb. As I knew that the United States of America and the United Kingdom were allies and both at war with a common enemy at the time, I recognized and knew that the information, sketch, writings and documents delivered by me personally to the individual known as Raymond related to the national defense and the war effort. In the preparation of some of the written material, in addition to my knowledge and recollection, I referred to official files and documents of a restricted, classified type in the records of the atomic energy project at Los Alamos. This was done certainly in the preparation of the written information delivered by me to Raymond with reference to the special method of detonation, ~~certain highly technical and confidential data with reference to the treatment of the active core~~; the IBM calculations and the results of efficiency calculations. (S) u

At this meeting in June, 1945, between Raymond and myself at Santa Fe, we planned and agreed upon a further meeting to be held in Santa Fe, New Mexico, in, I believe, September, 1945. In keeping with these plans, I met the same individual Raymond again in September, 1945 at Santa Fe, New Mexico. (S) u

En route by automobile to Santa Fe for this planned meeting with Raymond, I stopped somewhere on the way in the desert, drove off the highway to a solitary place, and wrote a part of the written paper or document which I planned to deliver to Raymond and which contained highly confidential, official and classified information relating to national defense, to the preparation of improved weapons of warfare and secret processes relating to the production and efficiency of such weapons. The said written paper or document, which I prepared in longhand, contained confidential, technical, classified information as follows: The results of the Trinity test or Alamogordo atom bomb test explosion; technical work on the initiator; information as to the preassembled core; a special phase of plutonium, and the uses of a special secret alloying constituent. All of this written information I gave to the individual known to me as Raymond, in keeping with prearranged plan and with the intention that Raymond would act as an agent in the transmittal of all such information and data to and for the use and advantage of the Soviet Union in the research, development and construction of an atomic weapon in, by and for the advantage of the Soviet Union. (S) u

I have been shown by Assistant Director Hugh H. Clegg and Special Agent Robert J. Lamphere photographs of an individual which these officers of the

Klaus Fuchs

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Federal Bureau of Investigation have informed me were the photographs of an individual by the name of Harry Gold and I have seen these photographs and positively identified them as the photographs of the aforementioned person known to me as Raymond. I was also shown a projection of a moving picture film by these same officers of the Federal Bureau of Investigation which I have positively identified as the moving picture projection of the aforementioned individual known to me as Raymond, and these same officers have informed me that these were the projected moving pictures of one Harry Gold. These pictures or photographs were of a person identical with my contact agent of the Soviet Union in the United States of America. (S) U

I received suggestions from Raymond during the aforesaid meeting he had with me in Santa Fe, New Mexico, that, since I was to return reasonably soon to England to continue my atomic research and scientific activities with reference to atomic energy there, I should arrange to meet a certain individual on a given date and at a specified time in the vicinity of Mornington Crescent, London, England, for the purpose of continuing to furnish, through this individual as an agent of the Soviet Union, additional confidential, classified information, in order that such information might in the future, following my return to England, be transmitted to and for the advantage of the Soviet Union. Due to information which I received through public printed sources relative to alleged Soviet espionage activities in Canada, I decided not to run the risk of making the contact which had been suggested to me by Raymond prior to my departure from the United States, but, on my own initiative, I sought out other contacts which might be used for a similar purpose. (S) U

I returned to England in the summer of 1946 and took up employment in the atomic research establishment at Harwell, England. After my return to England, I was again in contact with persons whose real identities I do not know, but whom I contacted with the intent of furnishing to the Soviet Union information concerning atomic research developments. To these persons I furnished additional information concerning atomic research which had come into my possession, both in the United States and England, including information relating to certain research being made on the problem of detonating a ^{nuclear} hydrogen bomb. My last contact in this respect was in February of 1949. (S) U

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I have personally and carefully read this statement consisting of ten single-spaced, typewritten pages and I do hereby state that all the above information is true and correct to the best of my knowledge and belief. (S) u

Signed this the 26th day of May, 1950.] (S) u

Klaus Fuchs] (S) u

Witnesses:

Hugh H. Clegg
Hugh H. Clegg, Assistant Director
Federal Bureau of Investigation

Robert J. Lamphere
Robert J. Lamphere, Special Agent
Federal Bureau of Investigation

William James Skardon
William James Skardon, Officer
Security Service, United Kingdom

(S) u

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FOIA 56,261
CA 75-1121

Wormwood Scrubs Prison
London, England (S) U

I, Emil Julius Klaus Fuchs, a prisoner in Wormwood Scrubs, a penal institution in London, England, do hereby make this statement, freely and voluntarily, with no promises or threats having been made to me, and I have been specifically informed that I do not have to make any statement of any kind whatsoever. (S) U

This statement is made to Hugh H. Clegg, who has been identified to me as an Assistant Director, and to Robert J. Lamphere, who has been identified to me as a Special Agent, both being identified as officers of the Federal Bureau of Investigation, United States Department of Justice of Washington, District of Columbia, U.S.A. I am making this statement in the presence of the two aforesaid officers and William James Skardon, whom I know to be an officer of the Security Service of the United Kingdom. (S) U

I was born in Russelsheim, Germany, on December 29, 1911, and became a naturalized citizen of the United Kingdom on August 7, 1942. I came to England arriving on September 24, 1933. In May, 1941, I accepted employment at the University of Birmingham in England as a scientist on atomic energy research development. When I learned of the purpose of this research work, I decided and planned to furnish information concerning this work to and for the benefit of the Union of Soviet Socialist Republics, hereinafter referred to as the Soviet Union, and, in order to effectuate this plan, in early 1942 I personally contacted an individual in England, whom I knew to be active in communistic affairs favorable to the Soviet Union. I made known to him my availability and readiness to furnish confidential and classified information and my occupational affiliation which gave me access to such types of information relating to atomic energy research. The person so contacted arranged for me to meet another individual, also in England, whom I later personally met in 1942. On one occasion in 1942 I met this latter individual, known to me as Alexander, at the Soviet Embassy in London, England. During my meetings with Alexander, I furnished to him in 1942 information including written data concerning atomic energy research which I knew to be classified and confidential, and for the purpose of such information being furnished to the Soviet Union as an aid in promoting atomic energy research and

(handwritten) K.F. (S) U

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DATE OF REVIEW 2/5/67
10/13/82

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development in and for the Soviet Union. Through and at the instigation of Alexander, I established personal contact with a woman whose name I do not know and whom I met near Banbury in Oxfordshire, England, sometime in 1942. I delivered confidential and restricted information to this woman, for the continued benefit of the Soviet Union, from 1942 until near the end of 1943. My atomic energy research employment was under the auspices of the British Government. (S)U

When I learned in 1943 that I was being officially assigned to go to the United States as a part of an official British Mission to work with the Manhattan Engineer District on atomic energy research development, I informed my contact, the aforesaid woman, of this assignment and she subsequently informed me how to make contact in the United States with an individual for the purpose of continuing my activities of furnishing, for the benefit of the Soviet Union, additional confidential information relative to atomic energy research in the United States. Her instructions were to the effect that I should on a certain day at a specified place in New York City, New York, U.S.A., meet an individual who would be wearing gloves and would have an additional pair of gloves in his hands, while I would have a ball in my own hand. This meeting was, according to her instructions, to be made on a street in New York City at a stated time. If the meeting was not effected initially as planned, a further meeting would be attempted at a designated later date. (S)U

In keeping with instructions, I proceeded by ship to the United States with other members of the official Mission from England, arriving at Newport News, Virginia, on December 3, 1943. Within three or four days I arrived in New York City, taking up residence first at the Taft Hotel, later at the Barbizon Plaza Hotel, and later at an apartment at 128 West 77th Street. I took up employment as a scientific consultant as a part of the British Mission, assigned to the Manhattan Engineer District, and engaged in research development and activities relating to atomic energy. (S)U

As agreed upon during the meeting with the aforementioned woman in England, I went to the designated meeting place on the lower East Side,

Klaus Fuchs

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Manhattan, New York City, New York, where, to the best of my recollection, around Christmas 1943, I met an individual at the time and on the day previously agreed upon. He was wearing gloves and carried an additional pair of gloves in his hand and I had a tennis ball in my hand. We exchanged designated identification words and I gave my correct name and he used the name of Raymond in making initial introductions. Raymond expressed his pleasure at being chosen for such an important assignment. He suggested to me to make certain, in keeping future meeting assignments, that I was not being followed. During this or the next succeeding meeting with Raymond, atomic energy and the development of an atomic bomb were discussed by referring to these terms in a general way. (S) U

I was motivated in keeping this meeting by a desire to aid the Soviet Union. I considered Raymond's status as an agent intermediary, acting for and in behalf of the Soviet Union in keeping with the plans aforementioned, which were initiated in England. (S) U

At and during this first meeting with Raymond in New York City, we agreed upon an early subsequent meeting and the time and place for such meeting, in order that I could furnish to Raymond highly confidential and classified documents or information concerning atomic energy research and development under the control of the Manhattan Engineer District. (S) U

A subsequent meeting between Raymond and myself, in keeping with arrangements, was held in Manhattan, New York City, in the vicinity of the Queensboro Bridge approach as we walked under this bridge during this meeting, which was held after dark. This meeting occurred during the early part of 1944. (S) U

On another occasion during the first half of 1944, I met Raymond, by prearranged agreement between us, on the street near a subway station, possibly the "Museum" station on Central Park West in New York City. Raymond usually suggested the meeting places, but I believe I suggested this meeting place because it was near my place of residence on 77th Street. (S) U

Another time, by prearranged agreement, in 1944 I met Raymond in the Bronx, New York City. This meeting was near a cinema, I believe,

Klaus Fuchs

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(S) U

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on Grand Concourse in the vicinity of 159th Street or 161st Street. (S) U

I believe I recall another personal contact between Raymond and myself in Queens, New York City, in 1944. (S) U

There were held about five or six meetings between Raymond and myself in New York City during the period from sometime shortly after my arrival there in December, 1943, to sometime prior to my departure in August, 1944, from New York City for Los Alamos, New Mexico, for official assignment on the atomic energy project there. (S) U

There was one other arrangement for my meeting with Raymond in 1944 in Brooklyn, New York, on a street location near some large buildings and where there was heavy traffic. This designated place may be on Eastern Parkway, but the meeting did not occur as I failed to see Raymond, although I was there. (S) U

At all the meetings between myself and Raymond no other person accompanied me and I observed no one who seemed to know Raymond. Most of these meetings between Raymond and myself were arranged by us to occur after dark. (S) U

Upon my official assignment with members of the British Mission, under the overall control of the Manhattan Engineer District in New York, I, with other scientists, was engaged in research in connection with the development of certain methods for the production of fissionable material. In connection with this, I prepared certain classified documents as part of the British Mission prior to my departure for Los Alamos, New Mexico, in August, 1944. I personally furnished all of the original drafts of these documents directly to Raymond, with the intent and purpose that he serve as an intermediary in the eventual transmittal of such documents to and for the benefit of the Soviet Union. These documents were delivered to Raymond by me in groups of one or more at most of the aforementioned prearranged meetings, which I had with Raymond in New York City during 1944. (S) U

In addition to the foregoing during my meetings with Raymond, as

Klaus Fuchs

(S) U

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above mentioned, I furnished to Raymond information which had come to my knowledge by virtue of my official employment and work under the overall control of the Manhattan Engineer District. This information, which I furnished to Raymond, included the fact that a large production plant was to be built in the Southeastern part of the United States for the production of fissionable material, and that this plant was to use two different processes, which I named, in the production of fissionable material. I also orally advised Raymond of the identities of certain leading research personnel on atomic energy projects. (S) U

In keeping with official instructions received by me, I was transferred to Los Alamos, New Mexico, where I arrived on or about August 14, 1944, for work on the atomic energy project there under the control and overall supervision of the Manhattan Engineer District. At Los Alamos I was provided a place of residence on the United States Government restricted area in a dormitory and took up employment as a physicist in the Theoretical Division of the Laboratory. By virtue of my work, my associations in connection with my work and the availability of confidential and classified official documents, I developed, received and had access to confidential, classified information of an official character. I remained in such employment at Los Alamos until about June 16, 1946. During this period of official employment I made a visit to the home of my sister, Mrs. Kristal Heineman, and her husband, Robert Heineman, on Lakeview Avenue, Cambridge, Massachusetts. I arrived at my sister's home on or about February 13, 1945, and remained there on a visit until about February 22, 1945. (S) U

Shortly after my arrival in Cambridge I was visited by Raymond, who asked me for additional information concerning my work at the Atomic Research Project at Los Alamos. I told him I would prepare in writing this material and made arrangements to meet him a few days later in Boston. At the agreed upon time I did meet Raymond in Boston, Massachusetts, at a place fairly near the Charles River and near a large public-type of building, reasonably close to what is known as North Station. I there delivered to Raymond a written report, which I had prepared in longhand consisting of about six or more pages, in which I had set forth confidential (S) U

These arrangements were made without the knowledge of my sister and her husband, who were not present during my discussion with Raymond and had no knowledge of its purpose. K.F.

Klaus Fuchs

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and classified information and data which I had received in connection with my employment at Los Alamos. This dealt with the whole problem of making an atomic bomb from fissionable material as I then knew the problem. This document included information known to me regarding the method of detonating an atomic bomb and other highly secret and technical information regarding the construction of an atomic bomb. I wrote this statement in my own handwriting and in English, and I intended that it should be delivered by Raymond through channels so as to reach physicists in the Soviet Union who would understand the technical language of the report. (S) U

I again met Raymond in Santa Fe, New Mexico, in June of 1945, the arrangements for this meeting having been made at the Boston meeting, mentioned above. We met on Alameda Street, and I then got my car and we drove out a lane to a deserted spot where we continued our meeting. At this meeting I delivered to Raymond a written report, which I had personally prepared in longhand. This included a description of an atomic bomb, which was to be tested at Alamogordo, a sketch of the bomb and its components with important dimensions indicated, and a written description of the various important technical aspects of the bomb. I orally informed Raymond, while we were in the car, the types of explosive to be used in the detonating of the bomb, the fact that the Trinity test was to be made, with the approximate site indicated, and information as to the intensity of the explosion measured in relation to TNT explosive force. (S) U

By prearrangement I again met Raymond in Santa Fe a few months later, I believe possibly in September. At this meeting I delivered to Raymond another written report, which detailed information concerning the Trinity test, which had been held at Alamogordo. I also furnished in the report certain other technical information which I had obtained from my work on the Atomic Research Project at Los Alamos. I fully intended in transmitting this report to Raymond that he should, in turn, transmit it so as to reach the Soviet Union. (S) U

I returned to England in the summer of 1946 and took up employment at the Atomic Research Project at Harwell, England. After my return to England, I was again in contact with persons whose real identities I do not know, but whom I contacted with the intent of furnishing to the Soviet Union information concerning atomic research developments. To these persons I furnished additional information concerning atomic research, which I had

Klaus Fuchs

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came in possession of, both in the United States and England, including certain research being made on the problem of detonating a hydrogen bomb. My last contact in this respect was in February of 1949. (S) (U)

I have examined photographs shown to me by Assistant Director Hugh H. Clegg and Special Agent Robert J. Lamphere, both of the Federal Bureau of Investigation, and I have identified two of the photographs as the individual I knew under the name of Raymond. I have indicated my identification by signing my name and the date on the reverse sides of these two photographs. (S) (U)

I have personally and carefully read this statement consisting of seven single-spaced, typewritten pages and I do hereby state that all the above information is true and correct to the best of my knowledge and belief. (S) (U)

Signed this the 26th day of May, 1950. (S) (U)

Klaus Fuchs

Witnesses:

Hugh H. Clegg
Hugh H. Clegg, Assistant Director
Federal Bureau of Investigation (S) (U)

Robert J. Lamphere
Robert J. Lamphere, Special Agent
Federal Bureau of Investigation (S) (U)

William James Skardon
William James Skardon, Officer
Security Service, United Kingdom (S) (U)

(U)

per ~~DOE~~
DTD 7/22/96

~~SECRET~~
ISF/DET

DECLASSIFIED BY SP6AC/JS
ON 7/31/96

Wormwood Scrubs Prison
London, England

3/2/96

List of some of the reports prepared by EMIL JULIUS KLAUS FUCHS personally or in collaboration with other scientists while working under the over-all control of the Manhattan Engineer District, and which reports were of a confidential and official classified character:

Bracketed info is no longer classified per DOE letter 5/15/84. SP6 BJA/RB6 #123/84 241,073

Title of Report	Rpt. No.	Classification	Date	Copy Furnished by Dr. Fuchs to Raymond Indicated by "Yes"; or "No," (meaning not delivered); Information Furnished to Raymond Indicated by "Excerpt"	Probable Place Where Delivered	Initials
Shock Attenuation in Rods	LAMS-402	Secret	7-26-46	No.		U (S)
Efficiency for Very Slow Assembly	LA-596	Secret	8-2-46	No.		U (S)
Effect of Evaporation of Free-Surface Velocities	LA-441	Secret	10-20-45	Excerpt from memory	London	U (S) K.F.
Initiator Theory, III. Jet Formation by the Collision of Two Surfaces	LA-325	Secret	7-11-45	3/9/96 CLASSIFIED BY SP6AC/JS DECLASSIFICATION: 25X/L No. FASA 56,24		U (S)
Penetration by Jets Produced by Cavity Charges	LA-328	Secret	7-14-45	No.		U (S)
Theory of Initiators II	LA-300	Secret	6-1-45	No.		U (S)

63 per DOE

CLASS BY SP1 GSK/RB6 G-1

DATE OF REVIEW OADR

225,667 10/13/82

241,073 Classified by SP-1 GSK/RB6

Declassify on: OADR

3012 1/23/84 36/84

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ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

Sub Enclosure #3

SECRET

1st set of brackets under the heading title of report are no longer classified
under DOE letter 5/15/84.
SP-6 BFA/RB6 5/23/84
#241,073

Copy Furnished by Dr. Fuchs to Raymond Indicated by "Yes"; or "No", (meaning not delivered); or Excerpted Information Furnished to Raymond Indicated by "Excerpt"

Probable Place Where Delivered

Initials

Title of Report	Rpt. No.	Classification	Date	Copy Furnished by Dr. Fuchs to Raymond Indicated by "Yes"; or "No", (meaning not delivered); or Excerpted Information Furnished to Raymond Indicated by "Excerpt"	Probable Place Where Delivered	Initials
Rarefaction Wave from a Plan Free Surface in an Explosive	LA-227	Secret	2-16-45	No.		U (S)
[REDACTED]		Secret	2-6-45	No.		U (S)
[REDACTED]		Secret	63 per DOE	Excerpt from memory	Boston	K.F.
Formation of Jets in Plane Slabs	LA-195	Secret	12-27-44	Excerpt from memory	Boston	K.F.
Title or Other Identification (S) U						
"The Optimum Pressure and Back Pressure in a Diffusion Plant" by K. Fuchs (undated, British file MS-92.)				Probably Yes.	Banbury	K.F.
"Cascade of Cascades in the DS Scheme" by K. Fuchs and R. Peierls (undated, British file MS-83.)				No. Declassified		(S)
"Cascade of Cascades in the DS Scheme, Part 3, Non-Orthodox Connections Between Sub Cascades" by Fuchs (undated British file MS-96.)				Probably Yes. SP-6 AG/JS	Banbury	K.F.
"The Rabbit Machine" by K. Fuchs and R. Peierls (undated, British file MS-81.)				Excerpt	Banbury	K.F.
[REDACTED]				63 per DOE		U (S)
[REDACTED]				No.		U (S)

SECRET

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Copy furnished by Dr. Fuchs to Raymond Indicated by "Yes"; or "No," (meaning not delivered) or Excerpted Information Furnished to Raymond Indicated by "Excerpt"

Probable Place Where Delivered

U (S) Initials

Title or Other Identification

"Note on the Control of the Branching Ratio in the 'Rabbit' and Back Feeding" by K. Fuchs (undated, British file MS-93.)

Yes

Banbury

K.F. (S)

"Fluctuations in a Diffusion Separation Plant" by K. Fuchs (undated, British file MS-64.)

Yes

Banbury

K.F. (S)

"Losses in the Rate of Production due to Withdrawal of Cells for Maintenance" by K. Fuchs (undated, British file MS-17.)

?

New York

K.F. (S)

"Fluctuations and the Efficiency of a Diffusion Plant, Part 3, the Effect of Fluctuation in the Flow of N-2" by K. Fuchs (dated June 6, 1944, British file MSN-12.)

Yes

New York

K.F. (S)

"Fluctuations and the Efficiency of a Diffusion Plant, Part 4, the Effect of Density Fluctuation" by K. Fuchs (undated, British file MSN-15.)

Yes

New York

K.F. (S)

"On the Effect of a Time Lag in the Controller of Plant Stability" by K. Fuchs (undated, British file MSN-3.)

Yes

New York

K.F. (S)

"Note on the Effect of Fluctuations on the Efficiency of a Diffusion Plant" by K. Fuchs (undated, British file MSN-5.)

Yes

New York

K.F. (S)

"Effect of Fluctuations on Plant Efficiency, Part 2, Fluctuations in the Rate of Production" by Fuchs (undated, British file MSN-10.)

Yes

New York

K.F. (S)

Declassified per DOE - 3 -
 Ltr dtd 7/22/96
 SP6 AG/JS 7/31/96

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Copy Furnished by Dr. Fuchs to Raymond Indicated by "Yes"; or "No," (meaning not delivered) or Excerpted Information Furnished to Raymond Indicated by "Excerpt"

Probable Place Where Delivered

Initials

Title or Other Identification

The Stability of the Rabbitt Machine; 4/10/42, B 106	?	Bombing	K.F.
Shock Hydromamics; 10/28/44, LA 165	No.		
Shock Attenuation in rods; 7/26/44, LAMS 402	No.		U(S)
Separation of Isotopes; 4/10/42; B 49	Can't identify	Bombing or London	K.F.
Rarefaction Wave from a Plane Free Surface in an Explosion; 3/16/45	No.		
Perturbation Theory in One Group Neutron Problems; 1/3/49, EM 1482	No.		
Penetration by Jets Produced by Cavity Charges; 7/14/45, LA 328	No.		
Oblique Detonation Waves; LAMD 87	No.		U(S)
Notes on the Expansion of U Sphere Inclosed in a Container; EM 145	Yes	Bombing or London	K.F.
Measurement of Nuclear Bomb Efficiency by Observation of the Ball of Fire at early stage; 2/20/46, LA 516	Excerpts from memory	London	K.F.
Los Alamos Tech Series Vol. 7, Part III, Chaps. 11-14 Blast Wave; 8/13/47, LA 1021	No.		
Los Alamos Tech Series Vol. 7, Part I, Blast Wave; LA 1020	No.		
Los Alamos Tech Series Vol. 7, Part IV, Blast Wave; LA 1023	No.		U(S)

(S) U

Brackets under Title or u (S)
 - 4 other ident. are no longer classified per DOE letter 5/23/84
 date 5/15/84. SP6BJA/RBG

Bracketed info under the heading "Site or other ident." are no longer classified under DOE letter 5/15/84 SP-6 BJA RBG 5/23/84 #241,073

Copy Furnished by Dr. Fuchs to Raymond, Indicated by "Yes"; or "No," (meaning not delivered); or Excerpted Information Furnished to Raymond Indicated by "Excerpt"

Probable Place Where Delivered

Initials

Title or Other Identification

Los Alamos Tech Series Vol. 7, Part II, Blast Wave; LA 1021
63 per DOE

No.

Excerpt from memory Boston

K.F. U(S)

Isotope Separation with Complex Molecules; 4/10/42, B 39

Yes

London or Banbury

K.F. U(S)

Initiator Theory III Jet Formation by the Collision of Two Surfaces; 7/11/45, LA 325

No.

Excerpt

Banbury

K.F. U(S)

Gland Problems; 6/29/42, B 73

Formation of Jets in Plane Slabs; 12/27/44, LA 195

Excerpt from memory

Boston

K.F. U(S)

Fluctuations in a Diffusion Separation Plant; 11/20/42, B 105
38 MS-71

Probably first parts only

Banbury

K.F. U(S)

Finite Width of Single Membrane; 4/10/42, B 45

Yes(?)

Banbury or London

K.F. U(S)

Equilibrium Time in a Separation Plant; 4/42, MA 47 A

3 can't identify

The Equation of State of Air at High Temperatures; 9/18/43, BM 83

No.

Efficiency for Very Slow Assembly; 8/2/46, LA 596

No.

Effect of Separation of Isotopes of Compound Molecules; MS 44 A

Yes

Banbury or London

K.F. U(S)

(S) U

Bracketed info under heading "Title or other ident" ALL NO longer classified per DOE letter 5/15/84.

SP6 BJA/RBG #241,073 5/23/84

Copy Furnished by Dr. Fuchs to Raymond Indicated by "Yes"; or "No," or Excerpted Information Furnished to Raymond Indicated by "Excerpt"

(meaning not delivered)

Probable Place Where Delivered

Initials

Title or Other Identification

Effect of Packing on Critical Radius of the Sphere; 4/10/42, B 48

Yes

London (1)

K.F.

Effect of Evaporation on Free Surface Velocities; 10/30/45 LA 443

Excerpts from memory

London (2)

K.F.

Effect of Boundary Layer for Swept Membranes; B-31

Yes

London (1)

K.F.

Effect of a Scattering Container on the Critical Radius and Time Constant; BM 70

Yes

London (1)

K.F.

The Critical Radius and the Time Constant of a Sphere Imbedded in a Spherical Scattering Container; BM 144

Yes (?)

Bombay

K.F.

Critical Radiation and Time Constants for Finite Reflector 7/24/42 B 81

?

Probably Excerpt

No.

Comparison of the Variation Theory and End Point Results for the Tampered Spheres; 1/18/45, LA 205

The "T" Division progress reports for 1944, LAMS 177, 11-44, contain articles apparently by Fuchs, Podger, and Stark entitled "Two Dimensional Problem" the first sentence of which reads - "...Pressure exerted by the detonation in Comp. B on a steel liner has been calculated for various angles of incidence of the detonation wave."

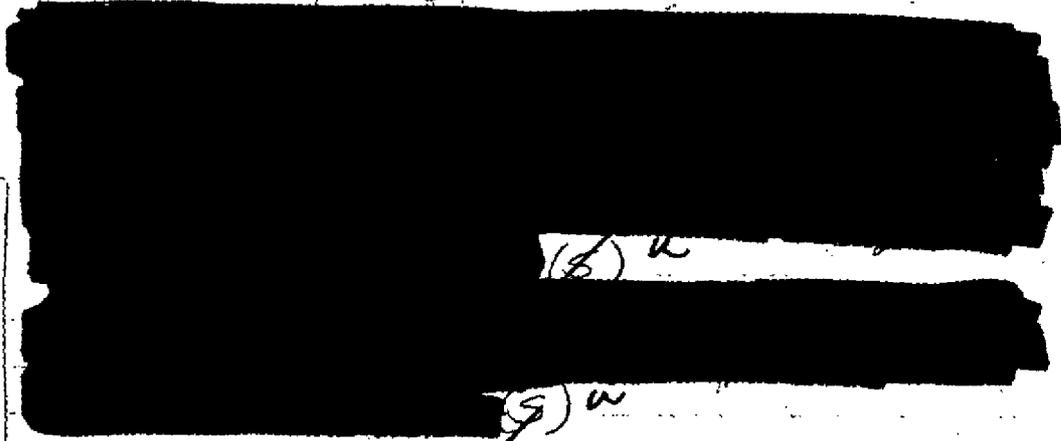
No.

U

Klaus Fuchs

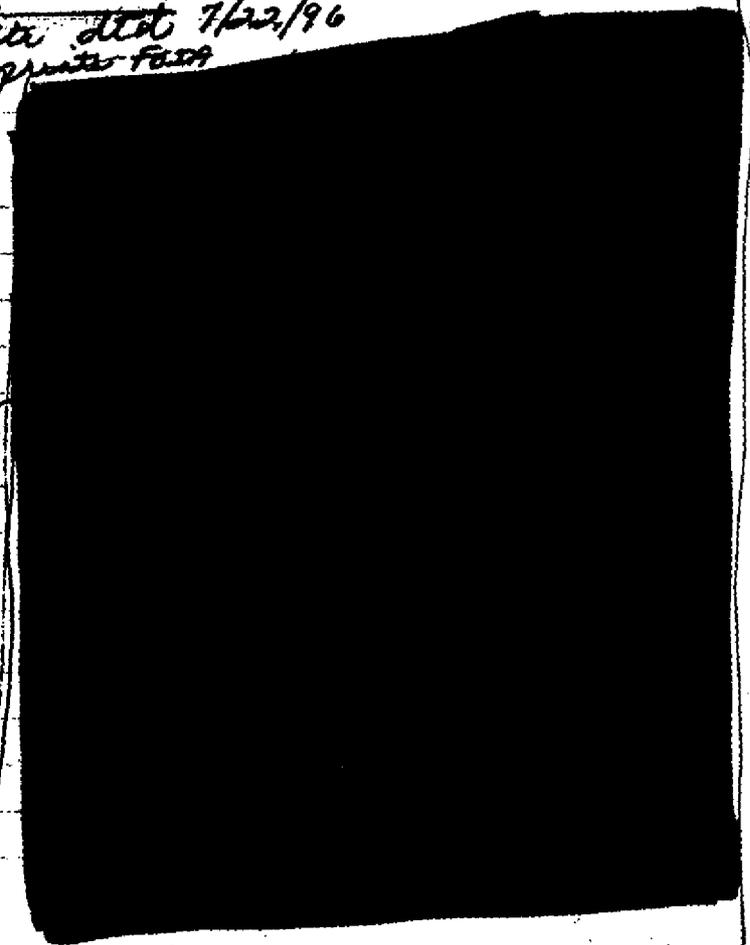
26th May 1950

SECRET



b3
per
DOE

DECLASSIFIED BY SP6AG/JS
ON 7/26/96
Per DOE OIA dtd 7/22/96
Apply appropriate FARS
Exemption.



~~CLASSIFIED BY SP6AG/JS
DECLASSIFY ON: 25X
FCR 25X
C 75-121~~

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Declassify on: OADR

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CLASS BY SP-165X/RBG

DATE OF REVIEW 10/13/92
225,487

Sub enclosure # 5

241,078
Classified by SP-165X/RBG
Declassify on: OADR
3/30/84
3045 107/10/2/10/17

(S)

Item # copy
Sub enclosure #6

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MAY 17 1967
MAY 17 1967

65-58805
265-735
Classified by 60371/RSR
Declassify on: OADR

ALL INFO
HEREIN IS
EXCEPT WHERE SHOWN
OTHERWISE
UNCLASSIFIED

Norman Leonard Peterson
London England

I, Emil Julius Klaus Fuchs, a
prisoner in Normwood, served a Peace
institution in London England, do hereby
make this statement, freely and voluntarily
with no promises or threats having been
made to me and I have been informed
that I do not have to make any statement
of any kind whatsoever. (u)

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 2/19/80 BY 60371/RSR

This statement is made to
Mr. J. G. who has been identified to me as an
Assistant Director, Robert
Lampshire who has been identified to me
as a Special Agent both being
of the Federal Bureau of Investigation
United States Department of Justice
Washington, D.C. and
in Office of the Federal Bureau of Investigation
Washington, D.C.

CP-15
11-29
FOIA
56,260

~~I was born in Germany on December 29, 1911 and became
a naturalized citizen of the United Kingdom
on August 7, 1942. I came to England arriving
on September 24, 1933. In May 1941, I accepted
employment at the University of Birmingham in
England on Raton's energy research development
work. I learned of the purpose of this research
work and I decided to furnish information
concerning this work to the benefit
of the Soviet Union of Soviet Socialist Republics
in order to expedite this plan. I personally
contacted in person an individual in London
I knew to be active in Communist circles.~~

I was born in Rostock, Germany on December 29, 1911 and became
a naturalized citizen of the United Kingdom
on August 7, 1942. I came to England arriving
on September 24, 1933. In May 1941, I accepted
employment at the University of Birmingham in
England on Raton's energy research development
work. I learned of the purpose of this research
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of the Soviet Union of Soviet Socialist Republics
in order to expedite this plan. I personally
contacted in person an individual in London
I knew to be active in Communist circles.

sub enclosure 5

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STW

favorable to the Soviet Union. I had in fact
~~made contact with a person~~ ~~contact with such an~~
~~individual and made known to him my readiness~~
~~and availability.~~ I made known to ~~him~~ ^{to furnish confidential information} my
 availability, readiness, and ~~occupational affiliations~~ ^{which gave me access to such types of}
 information. ^{personally} The person so contacted ~~and urged~~
 for me to meet another individual ^{also} in England
 whom I ^{later} ~~personally~~ ^{met} contacted in 1942. On one
 occasion in 1942 I met this latter individual known
 to me as Alexander at the Soviet Embassy in London,
 England. During ~~my~~ ^{my} ~~contacts~~ ^{meetings} with this
 individual ~~and~~ Alexander, I furnished to him
 in 1942 information, ^{including instructions} concerning atomic energy
 research which I knew to be classified ^{and} confidential
~~and restricted~~, and for the purpose of such information
 being furnished to the Soviet Union as ~~an~~
~~aid in promoting the~~ ~~atomic~~ ^{and for}
~~research and development in~~ ^{the} Soviet
 Union. Through and at the instigation of Alexander
 I established personal contact with a female ^{whom}
~~whom I met~~ ^{whom I do not know} ~~whom I met~~ ^{whom I do not know} near Banbury in Oxfordshire
 England ~~and~~ ^{sometimes} in 1942. I delivered
 confidential, restricted ~~and~~ ~~classified~~ information
 to this woman for the ~~continued~~ ^{continued} benefit of
 the Soviet Union ~~from~~ from 1942 until near the
 end of 1943. My atomic energy research employment
 was under the auspices of the British Government.
~~When~~ When I learned in 1943 that
 I was being officially assigned to go to the
 United States as a part of an official British mission
~~to~~ to work with the Manhattan Engineer
 District ~~on~~ on atomic energy research
 development I informed ~~and~~ ^{my} contact,
~~the~~ the aforesaid woman, ^{of my assignment} ~~and~~ ^{and}
 and she subsequently informed me ~~how~~ to make contact

~~with~~ in the United States with an individual for the purpose of coordinating my activities of ~~participating~~ ^{furnishing} ~~available~~ for the benefit of the Soviet Union, additional confidential information relating to atomic ~~energy~~ ^{in the United States} research. Her instructions were ^{to the effect} that I should on a certain day ~~go to the place~~ at a specified place in New York City, N.Y., U.S.A. meet an individual ~~at~~ who would be wearing gloves and would have an additional pair of gloves in his hands while I would have a ball in my own hand. This meeting was ~~to be~~ according to her instructions to be made on a street in New York City at a stated time. If the ~~contact~~ meeting was not effected initially, as planned, a further meeting would be attempted at a designated later date.

In keeping with ~~my~~ instructions I proceeded by ship to the United States with other members of the Special Mission from England arriving at Newport News, Virginia on December 3, 1943. Within three or four days I arrived in New York City, taking up residence first at the Taft Hotel, later at the Barbizon Plaza Hotel and later at an apartment at 128 West 77th Street. I took up employment as a scientific consultant as a part of the British Mission assigned to the Manhattan Engineer District and engaged in research development and activities ~~concerning~~ relating to Atomic Energy.

As agreed upon ~~at~~ during the meeting with the ~~person~~ ^{group of members} in England I went to the designated meeting place on the lower East Side, Manhattan, New York City, N.Y. where to the best of my recollection around Christmas 1943, I met ~~the designated American contact~~ ~~person~~ ^{and} an individual at the time ^{and} ^{on the day} previously specified upon. He was wearing gloves and carried

an additional pair of gloves in his hand and I
 so had a tennis ball in my hand. We exchanged
~~different identification words~~
 and I gave my correct name and he used the
 name of Raymond in making initial introductions. Raymond
 expressed his pleasure at being chosen for such an
 important assignment. He ~~instructed~~ ^{suggested to} me to make certain, in
 future meetings, that I was not being
 followed. During this or the next succeeding meeting
 with Raymond atomic energy and ^{the development of} atomic bombs ~~were~~
 were discussed by referring to ~~the~~ these terms in a
 general way, and he asked no questions of

I was motivated in keeping this meeting ~~and~~
 by a desire to aid ~~the~~ Soviet Union. I ~~was~~ considered
~~Raymond's~~ status as an agent intermediary acting for and
 in behalf of the Soviet Union in keeping with
 the plans aforementioned which were initiated in
 England.

at and during the first meeting with Raymond in
 New York City we were agreed upon an early subsequent
 meeting and the time and place for such meeting,
 in order that I could furnish to Raymond highly
 confidential classified documents and information concerning
 atomic energy research and development under the ~~control~~
 of the Manhattan Engineer District.

A subsequent meeting between Raymond
 and myself in keeping with arrangements was
 held in Manhattan, New York City in the vicinity of the
 Queensboro Bridge and approach as we walked under
 this bridge during this meeting which was held
 after dark. This meeting occurred during the
 early part of 1944.

~~Another meeting with Raymond at which I had~~
~~no part~~

On another occasion ^{during the first half of} 1944 I met
 Raymond ^{by means of a request between us} on the street near a subway station
 possibly the "Museum" station of the ~~subway~~
 on Central Park West in New York City, Raymond U

SECRET

Usually suggested the meeting places but I believe I suggested this meeting place because it was near my residence on 77th Street.

Another time by arrangement, I met Raymond in The Bronx, New York City. This meeting was near a Cinema, on ~~the~~ Grand Concourse in the vicinity of 159th Street or 161st Street.

I believe to trace another ^{possible} contact between Raymond and myself in Queens, New York City in 1944.

There were held about five or six meetings between Raymond and myself in New York City during the period from sometime shortly after my arrival there in ^{December} 1943 and ~~August~~ sometime prior to my departure from New York City ~~for assignment~~ for assignment for Los Alamos, New Mexico for ^{special} assignment on the Atomic Energy project there.

There was one other arrangement for ^{my} meeting ^{with} in Brooklyn, ^{New York} on a street location near some ~~buildings~~ and where there was heavy traffic ~~on~~ ^{East} Eastern Parkway, but the meeting did not occur as I failed to see Raymond although I was ~~present~~ there.

At all the meetings between myself and Raymond, no other ~~person~~ person accompanied me and I observed no one who seemed to know Raymond. The most of these meetings between Raymond and myself were arranged by us to occur after dark.

Upon my official assignment, ^{with members of the} under ~~my~~ the overall control of the Manhattan Engineer District, ^{with} other scientists were engaged in a study of the principle of ~~gaseous~~ gaseous diffusion related to the ~~development~~ development of the production of materials to be used in ~~the~~ a proposed detonation of fissionable material.

SECRET

U.S.

6. SECRET

I with other scientists prepared certain highly confidential and classified documents relating to our official assignment and referred to as the MSN Series of documents. There were a total of approximately ~~nineteen~~ such MSN documents prepared ~~before the~~ prior to my ~~own~~ departure for Los Alamos, New Mexico in August 1944. I personally prepared about thirteen of these documents. In the process of the preparation of those ^{MSN documents} written by me, I would first prepare a draft, then on some occasions they would be sent to my immediate superior for reading then in turn would be forwarded ~~for his~~ ~~approval~~ routed for duplication. ~~Most of the time~~ however I would route the draft which I prepared ^{directly} for duplication. In all instances when I prepared the draft the duplicated copies and the ^{original} draft would be returned to me. I would number each of the duplicated copies for control and security purposes due to the highly confidential character of the contents, though I would personally retain the original draft which most of the time I had prepared in long hand and I personally furnished all of the drafts of my own composition directly to the individual known to me as Raymond, with the intent and purpose that he serve as an intermediary in the ^{original} transmission of such so secret documents and for the benefit of the Soviet Union. These documents ~~were~~ were delivered by me personally, at times folded and at other times in package form, ~~were~~ and were ~~to be~~ delivered personally ⁱⁿ groups of one or more at ~~most~~ ^{most} of the aforementioned meetings ^{at the initial project meetings} which I had conducted with Raymond in New York City during 1944.

(to be continued)

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Also during my meetings with Raymond
 as above mentioned in New York City, ^{Dec 1943} 1944, ^{and}
 I furnished to Raymond confidential, classified
 official information which had come to my knowledge
 by virtue of my official employment and was
 under the overall control of the Manhattan
 Engineer District as follows: Oral information
 that there was to be built somewhere in the
 Southern part of the United States a large
 production plant or establishment to be
 engaged in the production of fissionable
 material utilizing the gaseous diffusion process
 and the electro-magnetic process in dual production;
~~that the construction of this plant would require the production of large quantities of uranium~~
~~and that the construction of this plant would require the production of large quantities of uranium~~
~~and that the construction of this plant would require the production of large quantities of uranium~~
 During these meetings ^{concerning} the overall and general effort
 already made and then being
 made as known to me ^{concerning} with my own work
 relative to the production of fissionable material
 which would be used as an
 explosive in the war effort; general information
 about the membranes and their composition
 be made of ~~several~~ ^{several} ~~plates~~ ^{plates}, altho I
 did not know the technical details the general
 information was official, confidential and classified.
 In keeping with official instructions
 received by me, I was transferred to Los Alamos
 New Mexico where I arrived on or about August
 14, 1944 for work on the Atomic energy project
 there under the control and overall supervision of
 the Manhattan Engineer District. At Los Alamos I
 was provided a place of residence on the
 U.S. Government restricted area and in dormitory ~~rooms~~
 and took up employment as a physicist in the
 Theoretical ~~Physics~~ Division of the Laboratory. By virtue
 of my work, my associations in connection with my
 work and the availability of confidential, classified

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During this ^{covert} meeting between Raymond and myself in Boston in February 1945 we made an agreement and arrangements for a meeting ^{to be had in} June 1945 at Santa Fe, New Mexico ^{between us}.

I returned about ^{my way back} to Los Alamos, New Mexico ^{on or about} February 25, 1945. In keeping with the aforementioned agreement and plans made in Boston I met Raymond in Santa Fe, New Mexico in June 1945, ^{shortly before the Trinity} ~~probably about the first of~~ ^{the} ~~Trinity test~~. Raymond indicated that due to his other employment he had difficulty in getting finding an opportunity to come to Santa Fe. We met as per arrangement on Alameda Street ^{where it lies} ~~alongside the river~~, ^{adjacent to} this street has are a number of trees and benches. I went for ~~my~~ the car I was using, picked up Raymond and we drove across the river bridge turned into a lane which ended at a gate in an isolated ~~place~~ ^{place} and there we continued our meeting. I delivered to Raymond, ^{confidential and classified} written information ^{in a paper or papers} which I had personally written in longhand. ^{and} ~~in this~~ ^{the} written ~~information~~ ^{report} were the following items of confidential ~~and~~ classified information: A ~~of~~ description of the plutonium bomb which had been designed and was soon planned to be tested at ~~Trinity~~ Alamogordo; A sketch of the bomb and its components with important dimensions indicated; the type of core; a description of the initiator; ^{details as to the tamper} ~~the types of explosives~~ ^{used in the bomb}. I orally informed Raymond while we were in the car at ~~the~~ ^{the} time and place indicated ~~that~~ the names of the types of explosives to be used in the bomb; the fact that the Trinity test explosion was to be made, ^{with the approximate date indicated} ~~soon~~ in July 1945 and that the test was expected to establish that the ~~atom~~ ^{atom} bomb would ~~be~~ produce an explosion vastly greater than TNT and ^{the comparative} ~~strength~~ ^{estimated} of the explosion was indicated.

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SECRET

in detail with relations to TNT. All of ^{the} information ^{and delivered by me} given to the individual known to me as Raymond as above set forth, both orally and in writing ^{in the form of a sketch} was known by me to be highly confidential and classified and pertained to the principles of production, calculated effectiveness, testing and the development of an atom bomb. As I knew that the United States of America and the United Kingdom were allies and both at war ~~at that~~ with a common enemy at the time I recognized and knew that the information, sketch, writings and documents delivered by me personally to the individual known as Raymond ~~were~~ related to the national defense and the war effort.

At this meeting in June 1945 between Raymond and myself at Santa Fe we planned and agreed upon a further meeting to be held in Santa Fe, New Mexico in, I believe, September, 1945. In keeping with these plans I met the ^{said individual} Raymond again in September 1945 at Santa Fe, New Mexico.

type in the records of the atomic energy project at Los Alamos.

This was done ^{in the preparation} of the written information delivered by me to Raymond with reference to explosion; the ~~type of compression bomb~~ the sequence of high explosive aluminum powder ~~type~~ principles of uranium tamper and the active core; the FBM calculations and the results of efficiency calculation.

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I have previously identified
 Federal Bureau of Investigation which were the
 moving picture projection of the ^{approximation of} individual known
 to me as Raymond and that some officers have informed
 me that these were the projected moving pictures of
 one Harry Gold. These pictures or photographs were
 of a person identical ~~of~~ with my contact agent
 of the Soviet Union in the United States of America.

I received ^{suggestions} ~~instructions~~ from Raymond
 during the aforesaid meeting he had with me in
 Santa Fe, New Mexico

see notes

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SECRET

Project P10

I B M Calculations, the method of calculating efficiency

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SECRET

XXXXXX
XXXXXX
XXXXXX

FEDERAL BUREAU OF INVESTIGATION
FOIPA
DELETED PAGE INFORMATION SHEET

Page(s) withheld entirely at this location in the file. One or more of the following statements, where indicated, explain this deletion.

- Deletions were made pursuant to the exemptions indicated below with no segregable material available for release to you.

Section 552

Section 552a

(b)(1)

(b)(7)(A)

(d)(5)

(b)(2)

(b)(7)(B)

(j)(2)

(b)(3)

(b)(7)(C)

(k)(1)

(b)(7)(D)

(k)(2)

(b)(7)(E)

(k)(3)

(b)(7)(F)

(k)(4)

(b)(4)

(b)(8)

(k)(5)

(b)(5)

(b)(9)

(k)(6)

(b)(6)

(k)(7)

- Information pertained only to a third party with no reference to the subject of your request or the subject of your request is listed in the title only.

- Documents originated with another Government agency(ies). These documents were referred to that agency(ies) for review and direct response to you.

Pages contain information furnished by another Government agency(ies). You will be advised by the FBI as to the releasability of this information following our consultation with the other agency(ies).

Page(s) withheld inasmuch as a final release determination has not been made. You will be advised as to the disposition at a later date.

54 Pages were not considered for release as they are duplicative of Report dated 6/4/50
in 65-58805-1412 EBF, part 1

Page(s) withheld for the following reason(s):

The following number is to be used for reference regarding these pages:
65-58805-1412 EBF, part 2

XXXXXXXXXXXXXXXXXXXX
X Deleted Page(s) X
X No Duplication Fee X
X for this page X
XXXXXXXXXXXXXXXXXXXX

XXXXXX
XXXXXX
XXXXXX

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 3/9/96 BY 3696/JS

CAF 75-1121
FOIA 56, 261

Enclosure to Legal Attache, London, attn: Asst. Dir. H.H. Clegg,
from Bureau 5/22/50; (X)U

Ltr from AEC, dated 5/19/50, & its encls entitled "Evaluation of
Fuchs Case by Committee of Senior Responsible
Reviewers" and "Fuchs' Participation in the Thermo-
nuclear Weapon Program at Los Alamos," (X)U

DECLASSIFIED BY 9145 JFE/AG/RBY
ON 1/23/84 #205,729

CLASS. & EXT. BY SR2 TAP/JRM/REC
REASON - FCIM 11, 1-2.4.2/1-3
DATE OF REVIEW 2/8/80

2/28/80

CLASS BY SA CSK/RBY
DATE OF REVIEW 10/13/82
225,667

SECRET

Sub enclosure to 7

SECRET

In Am. ~~copy~~ no info re H. Bomb Passed -
Do info. Parrau

H. Bomb
(S) U

Last print of Los Alamos dis. Reference -
H. Bomb.

Argue with secy about H. Bomb - who le
step is dynamic - least with U.S. Work.

~~John~~
~~John~~
John left at 2:30

(S) U

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 2/9/96 BY SP6/AS/JS
CF 75-1621
FOIA 561261

Report says - ~~regis~~ slightly confused -
Present state of knowledge -

~~John~~

(S) U

When left Los Al knew a much ~~more~~ AB

Personnel talent AB - apt. A.

Prod. 725 - 100 Kg pr mo.

Act. - ~~10~~ 20 Kg pr mo.

no steeple - 45. Further -

Division into mol. & Rnment - very little steeple

AB
Product U
Steeple

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
EXCEPT WHERE SHOWN
OTHERWISE

(S) U

CLASS. BY SP2/AS/JS
REASON: FCIM 11, 1-2.4
DATE OF REVIEW 2/28/90

DATE OF REVIEW 10/13/82

CLASS. & EXT. BY SP2/AS/JS
REASON: FCIM 11, 1-2.4
DATE OF REVIEW 2/28/90

DECLASSIFIED BY 9145/STF/AG/RS
ON 1/23/89
3042 awt
2/13/89

65-58805-1412

sub enclosure #8

SECRET

SECRET

1st meeting

1st meeting at home of Jones outside
Could have gone to a Restaurant - did so at one
meeting but remember what time a meeting restaurant

From home of meeting part by a large
→ Blooming Flats near one of meetings as recollect of Playgird
no materials of meeting - looked but that day
arr. early meeting

no def. recall. Very likely -
similarly no acc for meeting unless planned to
see Smith, no materials recollect. for activities
between meetings

Meeting in Brock - it since Jordan strikes for a
week. Car understood not since 1 hr.

Meeting some where - Queen - District -
They have been few meetings when no material
passed - groups toward end - arranging
for further contact -

O gin at home - any further meetings
prop. material

65-58805-14/2

SECRET

~~SECRET~~

Info - My

✓
Passed - My Diffie-Hellman + Enc. Proofs.
Calculator on side + hollow set.
Jim method would not work either -

CM

65-58805-1412

~~SECRET~~

3

SECRET

Ally's
winning
+ CPT +

Tech firm - writing
 info re various - activities at various
 places - orally - Propaganda orally -
 News box notes at meetings -

SM

Account

65-58805-1412

SECRET

A

~~SECRET~~

the constant
type - 10/11
10/12

no. 1000

sig?

no action or no info or done

by any one would have given
me to a scrap in my mind

The only thing approaching it
once met for person - had feeling this
was the kind of person

purely intuitive

6000 - keep away -

kind of person might be intelligent -

stupid type of intel can would not find

well -

this would not be type

age - younger - those physical -

maybe only app -

Discipline -

W

~~SECRET~~

SECRET

H. Bone. Broad temples for gray temples

Red hair

Comp. and

Long fingers - Rosy hands - right knuckles

Swallow's hand & ankle

Smokes Cigs.

Arists prominent & hands faint the white

Reds lips and some about with grey

Left hand - spots of some form acc.

Notable thin lips like hair line

Teeth regular - ~~one~~ upper to right quite dark

TU

Descriptive of TU

SECRET

~~SECRET~~

ENCLOSURES:

- Exhibit #1 - 2 photographs of Harry Gold identified in Fuchs' handwriting.
- Exhibit #2 - Sketch of A-Bomb.
- Exhibit #3 - Signed form listing number of reports prepared by Fuchs.
- Exhibit #4 - 10-page signed statement of Fuchs.
- Exhibit #7 - 1-page signed statement of Fuchs.
- Exhibit #8 - Photograph of Fuchs at age of 16 or 17 years and another photograph at the age of about 20 years furnished by British Security Service.
- Exhibit #9 - Photograph of Fuchs taken in 1943 as furnished by British Security Service.

~~SECRET~~

sub enclosure # 9.

(2)

ENCLOSURES:

SECRET

- Exhibit #4 - Sketch of A-Bomb.
- Exhibit #5 - Signed form listing number of reports prepared by Fuchs.
- Exhibit #6 - 10-page signed statement of Fuchs.
- Exhibit #7 - 7-page signed statement of Fuchs.
- Exhibit #8 - Photograph of Fuchs at age of 16 or 17 years and another photograph at the age of about 20 years furnished by British Security Service.
- Exhibit #9 - Photograph of Fuchs taken in 1943 as furnished by British Security Service.

SECRET

sub enclosure #9

U(2)

~~SECRET~~

CLASS. BY GH
DATE OF REVIEW 10/13/82

10/13/82

DECLASSIFIED BY 9145 JFE/AG/R86
DN 1123186
265,728
3042 PWR/WT 2/2/87

sub enclosure # 10

* No document attached to
sub enclosure # 10 when renewed on
5/14/98.

DECLASSIFIED BY 9145JFE/AG/IRBG
ON 1/28/88
DATE OF REVIEW 10/17/88
BY 10/17/88
#2615728
10/13/88



Taken in 1943. Good likeness.

Emil Julius Klaus FUCHS.

Born, 29.12.1911, Russelheim, Germany.
British by naturalisation, formerly
German.

Research Physicist.

Height:- 5' 9"-10"

Build :- Slight.

Complexion:- Sallow.

Hair :- Dark brown, parted on left
and receding.

Eyes:- Brown.

Features:- High Forehead, Clean shaved
Long lean face. Sharp
pointed nose. Wears
glasses.

306 enclosure # 11

U (S)

Eitel Julius Klaus FUCHS.



Copy of Photograph in German Passport.
Aged 16 - 17.

6718
10/13/82



Aged about 20.

sub enclosure #12

9/145JFE/AGM/82
11/03/86
#765, 728
3042 out/10/82
2/13/87

skip enclosure #43
~~SECRET~~ SECRET

Adv. Sr. Wagoner - Kerdoe
in Feb. Raton - Shorth

By Xmas. ^{what} cancelled Ymas trip
by decty ^{what} cancelled Ymas trip

HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

DECLASSIFIED BY 0145 OFE/AG/RA
ON 1/23/80

#265,728

Fre case - to rank - Palo

would remember - Don't
remember - Don't say no

CLASS. BY 5-1

DATE OF REVIEW 10/13/82

Re Rott. Classified by 30000000

Getting word. Declassify on: OADR

Sentine (7th) 17, 1944 + Any

account to A Home - told X

Some of would call
Jimmy possession -

"Ging from Karl" - Po

CLASS. & EXT. BY SP-1 TAC/TOM/KE

REASON - FCIM 11, 1-2.4.2 1963

DATE OF REVIEW 2/2/90 5/2/90

SECRET

CLASSIFIED BY SP2 AG/BS
DECLASSIFY ON: OADR
DATE 12/11/96 BY SP2 AG/BS
75-11214-61361
5167-22-90

Kris said - letter to Fat
Joseph has called
SECRET

Call at Cambridge - Oubrow

Ask Sr. Gasschil U.S.
7 upstairs - talked to him
upstairs room in which 7. Sept.
Sr. said something of chocolate -
lengthy talk = 10 mins. -
Probably in forenoon - not very
early - Don't stop for lunch - U.S.

Toed where was - Arr. to
meet again in Boston - night
home arr for S.F. meeting. Thiers
Gave him yellow maps of S.F.
Time & Date. left date skin -
Don't know time - (*)

(Bot map to Thiers arr. 7. Sept.)
SECRET