Harold Brown, Oral History Interview—JFK#1, 1964
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Biographical Note
Brown, Director of Defense Research Engineering in the Department of Defense from 1961-1965 and Secretary of Defense from 1977-1981, discusses atmospheric nuclear testing by the U.S. and Soviet Union; overstatement of the nuclear threat from the Soviet Union during the Eisenhower administration and how that affected the Kennedy administration; various missile systems; and the capabilities of the U.S.' nuclear weapons, among other issues.

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Harold Brown—JFK#1

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First of Six Oral History Interviews

with

Harold Brown

For the John F. Kennedy Presidential Library

INTERVIEWER: I have prepared for you and you have seen a list of the times when you have had contact with the President [John F. Kennedy]. I wonder if you might characterize that basically as to what you think were the most important meetings, and say something about them.

BROWN: Would you like me to run down the list, not all of which I remember? I can do that. There were a series of National Security Council [NSC] meetings, principally on the Nuclear Test Ban, with the President and with Secretary McNamara [Robert S. McNamara], and then the meeting with the British, all through 1961.

Then there were a series of budget meetings at Hyannis Port the day after Thanksgiving of 1961, and again the day after Thanksgiving of 1962, and a corresponding set of meetings in the White House on the budget subsequent to those National Security—I am sorry, subsequent to the meetings at Hyannis Port.

Then there were a series of meetings and trips on the space program, meetings at the White House, and then trips on the space program. I think those are probably the principal sets, and of course they don't appear chronologically. They are mixed into this list.

INTERVIEWER: The meetings that were held in the White

House, the National Security Council meetings, were they Cabinet level, or did they vary in composition depending on the issue?

BROWN: It depended on the issue. The Secretary of Defense and the Secretary of State [Dean Rusk] or the Under Secretary of State was always there. McGeorge Bundy was always there. When we were talking about the Nuclear Test Ban, most of the time the Chairman of the Atomic Energy Commission was there. The Director of Central Intelligence was there, or his representative. For instance, the Director of Central Intelligence changed late in 1961, so that John McCone [John A. McCone] was in on some of these, but he was not in at the beginning.

INTERVIEWER: The times you went were when you had some specific input, or did you go as a full member?

BROWN: No, this was when there was a specific item of discussion which the Secretary of Defense felt would profit by my presence.

INTERVIEWER: So when you were there, it was in a briefing capacity, or did you participate in the give and take of the meetings? Were they that formally structured?

BROWN: It depended on the meeting. The very first time was on May 19, 1961, the first date on your list, and I was somewhat surprised to find two nights before the meeting that McNamara was counting on me to be the principal presenter of the issues. Subsequently, briefings were…

INTERVIEWER: Was the issue on the resumption of nuclear testing?

BROWN: Well, it was on nuclear testing all right, but resumption, I think, was an issue in the background. It was principally an attempt to bring the President up to date on that. You see, the Fisk Panel, which had met in January and February, had been appointed by President Kennedy to examine the issues of how much there was for the U.S. to gain by nuclear testing, how much the Soviet Union could gain by nuclear testing, and how much could be done by testing in secrecy by the Soviets. This was at the time of the moratorium. But of course, that was the very beginning of the new Administration. The people in it had not yet had a chance to become familiar with these issues. The May proceedings, which, as I say, were my first substantial introduction to the President and his approach to things, were an attempt after the various agencies, the new people in the various agencies had a little time to get used to their problems, to examine the nuclear test situation, and indirectly the whole strategic situation, from that vantage point.

That was a two hour meeting at which there were lots of people present. Several of the chiefs of staff were present. Some of the service secretaries were present. It was a very unusual meeting in that regard, because most of the subsequent ones that I know of were much, much smaller.

INTERVIEWER: This was in the period when the NSC formal

mechanism was looked down on?

BROWN: I don't know. I think this was one of the cases where there seemed to be some formality involved, invitation involved, but I think subsequently it tended to decay a little bit. I am speaking now as an observer. I attended only a small fraction of these things.

INTERVIEWER: This was shortly after your own coming into office?

BROWN: It was the same month. Well, it was within a month after I took office. As I say, it was much more than I bargained for, when I first heard about the meeting. I gave what I hope was a dispassionate account of the situation, both as regards potential gains to be made by each side, the possibility of Soviet cheating, and so on, and I deliberately didn't reach a conclusion. I think the President was somewhat surprised, because he had expected, and I am sure I had the reputation of being a partisan of resumed nuclear testing. I gave what I believed was a dispassionate account.

INTERVIEWER: When you say you didn't reach a conclusion…

BROWN: I didn't make any recommendation.

INTERVIEWER: …a conclusion was expected, and that there really was a charged issue.

BROWN: Well, it was a charged issue on the part of many people, that is perfectly clear, but because I didn't believe a recommendation was being asked for, I didn't give one.

I tried to lay out the issues as clearly as I could. As I say, I think the President was somewhat surprised at that time because it may have been a charged issue, but it was a rather uncharged presentation.

A good deal of this later found its way into a column by Marquis Childs [Marquis W. Childs], and obviously he had been talked to by somebody who was there. I never tried to find out who.

It was at this meeting that I got some idea of what or how President Kennedy was approaching the fundamental issues of national security and thermonuclear war, because he asked General LeMay [Curtis E. LeMay], who was, I think, the senior chief present—I am not sure that Lemnitzer [Lyman L. Lemnitzer] was present at that meeting—what his evaluation was of this strategic situation in a much more precise way than that. This was somewhat skewed as a nuclear test issue, although it was not unrelated, because the

fundamental question was, was the nuclear—I am sorry, would our strategic preponderance be upset by a continuation of the moratorium. Insofar as there was an issue, that was the issue at that time. This was before the Soviet Union unilaterally resumed nuclear testing, you will remember.

President Kennedy asked LeMay what the situation was now, so that he could have a baseline from which to examine what changes might be possible in the strategic situation under a nuclear moratorium, under continued nuclear testing, or under a situation where we kept a moratorium and the Soviets did the

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maximum amount of possible cheating.

As best I remember, he first asked whether LeMay was confident that in a situation where a thermonuclear war happened, first the situation in which the Soviets struck first, could we be sure of striking back, and LeMay answered—this was at the time when we had no ICBMs [Intercontinental Ballistic Missiles], but we did have some Polaris [Polaris missiles]—he answered principally in terms of strategic bombers, which were then certainly the very large majority of our strike capability, that he was quite sure of being able to get through and destroy Soviet cities.

[redacted]

Then I think either LeMay volunteered or Kennedy asked and elicited the response to the effect that a few years, a year or two or three later the situation would be inevitably substantially worse from the U.S. point of view. That is, that the Soviet potential for U.S. casualties in a second strike was inevitably going to grow.

I think this is the kind of thing that influenced Kennedy's thinking quite a lot.

INTERVIEWER: Are you under the impression that this is

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first time this issue had been raised?

BROWN: I am sure it was not the first time it was raised, but I think it may have been the first time that Kennedy asked LeMay the question.

INTERVIEWER: With what significance? That there came a meeting of minds between the two, or LeMay realized…

BROWN: No, I am not sure that anybody realized anything. I think it probably impressed upon President Kennedy, not for the first time, I suspect, but perhaps more strongly, because it was LeMay who was saying it, that it was very likely that as time went on, the U.S. strategic monopoly was going to be eroded,

no matter what happened. The degree of erosion, of course, depended a lot, and has depended on, and will depend on, what we do and what they do. But the situation of 1949 or 1954 when we were capable of the first strike, but the Soviets were not capable, that we were capable of a first strike with a comparatively small—looked at in terms of the numbers one thought of in those days—number of casualties resulting to us and the Soviets were not, the situation had already changed quite a lot and was almost inevitably going to change some more, in such a direction as to make U.S. casualties even in a U.S. strike-first situation, larger and larger as time went on.

INTERVIEWER: Was this the point of your briefing at the time?

BROWN: No. My briefing was really directed to very

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much more restricted range of questions involving the advantages of improving nuclear technology, which could be gained by nuclear tests by one side or by the other side. These advantages, of course, were fairly clear, and the limitations of what you could gain were also fairly clear. There was a whole series of tactical nuclear weapons which were still under, or whose development depended on further nuclear testing. There was an improved yield-to-weight ratio in small weights which had, or which would have and subsequently has had a substantial influence on the size of our warheads and penetrability of our warheads to possible antiballistic missile defenses.

Of course, there were limitations to this. That is to say, you were sure or almost sure of being able to have a second strike without these nuclear tests, but carrying them out would give you even greater assurance. This was so on both sides. I think this naturally led to the question which Kennedy asked.

INTERVIEWER: Which he asked you?

BROWN: No, he asked LeMay.

INTERVIEWER: What did he ask you?

BROWN: That is a little harder for me to remember. I think he asked me more details about whether our missiles required the development of these further nuclear weapons capabilities, lighter thermonuclear weapons, and I think I made it clear that they did not require them, but they would be improved by it.

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INTERVIEWER: Who were the other participants?

BROWN: Well, this is three years ago, so it is a little hard to remember. I know that McNamara participated. I know that the Atomic Energy

Commission people, Seaborg [Glenn T. Seaborg] participated. But the presentation with the exception, I think, of a CIA presentation on current nuclear status, was principally made by me.

INTERVIEWER: Then you continued staying involved in this issue through the summer and fall. I gather in the fall there was quite a flurry of meetings.

BROWN: Well, of course, there was a flurry of meetings after the Soviets resumed nuclear testing, during that summer. I don't remember the exact dates, but I think it probably was the end of August. We could look it up, I suppose, but I believe that it was in August and September, subsequent meetings, or the next meetings took place. In the meetings that took place on August 8, perhaps, but I am not sure about that, September 5 and November 2, really were a consequence of that Soviet action. I think, as I remember, the President's reaction was very strongly that we had to get some underground nuclear tests started. But of course there were a whole series of discussions through that fall and the next February and March and finally April, I guess, on the question of whether we should resume atmospheric nuclear testing. But the President's first reaction, I think, was one of annoyance that we could not resume

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underground testing more quickly. He felt that after the Soviets had set off about three that we had to make some kind of response. He was obviously reluctant to resume atmospheric testing. I remember that first evening, I wish I could remember which one it was, the Soviet announcement was picked up by somebody who was monitoring Soviet open broadcasts, not a piece of intelligence, particularly, but just somebody monitoring Soviet overseas broadcasts, somebody on—I am not sure where, Cyprus, maybe—that first evening we in Defense started to prepare an announcement that the President could make, and I think we found that we had been preempted by the White House staff, probably Jerry Wiesner [Jerome B. Wiesner] and Arthur Schlesinger [Arthur M. Schelesinger, Jr.], who had made up an announcement—no, I guess it was Arthur Schlesinger plus State Department people, who had made up an announcement, deploring the Soviet resumption of atmospheric nuclear testing, partly on the grounds of fallout, which somewhat distressed me, because I have never been able to work up very much indignation about fallout as a reason for not doing nuclear tests. I have always felt that there are reasons for wanting to do them having to do with armaments, and reasons for not doing them having to do with arms limitation, but that the fallout issue, however great its importance politically, had rather little importance scientifically or strategically. This is something which I think President Kennedy had quite a different view of from the beginning. He placed considerable

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stress on the fallout issue, and not just for political reasons. I think he really believed that it was a menace, although I don't think he got any responsible scientific advice that said it was a real problem.

INTERVIEWER: Did he ever come to you for that, or did he turn to others?

BROWN: I don't know. I know he asked me on several occasions, but I don't think the answers that I gave him convinced him.

INTERVIEWER: Your answers tended to be along what line?

BROWN: That fallout clearly wasn't doing anybody any good. It could well be a hazard, but it was a hazard trivial compared to hazards people accept all of the time, I think almost every one of his statements on this, however, reflected a much stronger view against it, and he always strengthened those statements himself. I think this is something which really concerned him.

INTERVIEWER: Were your contacts with him usually in this formal meeting arrangement, or did you talk to him on the telephone, or see him under less formal circumstances, say at parties?

BROWN: All of these arrangements, or most of these meetings were meetings of, say, a half dozen or a dozen people, either in the Cabinet Room, or one of the houses he was using at Hyannis Port. On three or four occasions he called me on the

telephone about something.

INTERVIEWER: What kinds of problems on the phone, do you remember?

BROWN: Yes. They had to do with things that were time-urgent. Once I remember I was eating in the White House mess, just happened to be over there, and he called me up and asked me about the F problem, that is the F-4 and F-105. He had the publisher of *Newsday* [Alicia Patterson] out on Long Island coming in to see him, and she was very upset about the F-104 phasing down in favor of the F-4, and he called me up and asked me whether I had anything to do with that recommendation. I told him I had. I didn't tell him that mine was not the primary responsibility here, but I did give him enough reasons why this was the right thing to do, so that I think he was able to satisfy her.

INTERVIEWER: Was she there at the time? Was she in the room?

BROWN: No, she was coming in. I think he had an appointment with her. On another occasion he called me up and said he wanted to send over Hugh Gaitskell, and he did. This was after he had decided to resume atmospheric tests, nuclear tests, and he wanted somebody to tell Gaitskell why.

INTERVIEWER: Did you talk to Gaitskell later?

BROWN: Yes. And then he called afterwards and checked up on what I thought the reaction had been.

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INTERVIEWER: Yesterday we were talking about your telephone contacts with the President. You mentioned two, one with Alicia Patterson, or dealing with Alicia Patterson, and one about Hugh Gaitskell.

BROWN: That is right.

INTERVIEWER: Could you tell me what your contact with Gaitskell had been, and what the President asked you afterwards?

BROWN: I think he asked afterwards whether Gaitskell had responded affirmatively to the argument which I had given explaining why we were resuming atmospheric nuclear tests after the Soviets had done so. This was, I guess, In the Spring of 1962, just before the announcement was made that we would. I think the next day Gaitskell made a statement saying that he would understand why we did if we did.

INTERVIEWER: Did Gaitskell try to argue with you?

BROWN: Not particularly. He seemed much more interested in getting the information than he was in conducting a debate.

INTERVIEWER: Did you see him here in the Pentagon?

BROWN: Right where you are sitting now, yes. I found him very impressive. He was a very able, understanding person. Well, those are two typical telephone contacts. I guess on one other occasion the President called me about a trip

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he was planning to take out to California to a number of installations, and asked what I thought might be the best way for him to meet some of the people at the Livermore Laboratory [Lawrence Livermore National Laboratory], which I had directed, and I was going with him on the trip. I forget what I suggested, but anyway, it worked out so that he did see some of them.

INTERVIEWER: I was going to ask what his particular concerns were about seeing the

people at Livermore.

BROWN: I think he was mostly interested in trying to do something to help the morale of the people at the AEC [Atomic Energy Commission] laboratories, since this was after he had made the decision to resume atmospheric testing for one more round. I don't think their morale needed a great deal of boosting, but I think he felt he wanted to find out what some of their attitudes were without too closely associating himself with all of those attitudes.

INTERVIEWER: He seems to have been very concerned with this morale. In fact, in his statement justifying the resumption of testing, he pointed to morale as a factor that could not be avoided.

BROWN: Well, he had very, very strong arguments from the Atomic Energy Commission people, and from the laboratory directors, emphasizing the morale factor. I think that from what I saw of the way he made his decisions, he would not in his own mind justify or decide matters of policy on the basis of how it

would make even the most worthy citizens or government servants feel, but I think he recognized that having made his decision one way or another, he then should proceed to do what he personally could do to improve morale, and I think he did this.

INTERVIEWER: At what point in time was this?

BROWN: Well, it was a continuing problem, but the trip that I am talking about took place in, oh, let me think—it was in March of 1962, a trip that does not show on the schedule you have. It was a trip on which he was granted an honorary degree by the University of California at Berkeley, and then subsequently—no, earlier that day he met with some of the people from the Radiation Laboratory at Livermore, but at Berkeley. That is, the meeting took place in Berkeley.

Then following the convocation at the football stadium, he and Secretary McNamara and I went down to Vandenberg Air Force Base, and we saw a launching of either an Atlas missile or a Titan I missile, one or the other. As I say, it doesn't appear on this list, but it was in March, if I remember correctly, or April, of 1962.

INTERVIEWER: It was subsequent to the announcement of the resumption of atmospheric testing?

BROWN: I believe it was subsequent to that announcement but it may have been just before. It depends on whether it was March or April. That announcement was made at the very beginning of April, if I remember correctly. I could go back and look at

my own schedule or my own calendar, and we can find it.

INTERVIEWER: Did he meet Dr. Teller [Edward Teller] when he was out at Livermore?

BROWN: Oh, he had met him before that a couple of times. He was very, very careful to listen to lots and lots of people, not just people in the government, on these questions. I know he spent an hour with Teller, he spent an hour with Bethe [Hans A. Bethe], and before Teller went over to see him, he came in to see me, that is, Teller did, and I told him that if he was going to offer arguments on the antiballistic missile as a reason for resuming nuclear tests, and they were a reason, he should be sure that he knew quite a lot about the antiballistic missile himself, because President Kennedy did. This was as a result of two or three conversations to which I have not yet alluded, which took place between the President and myself, between the President and Wiesner, and others.

Afterwards it was fairly clear to me—and Teller then did go over and talk to him—afterwards it was clear to me at least at the moment of that conversation, from Teller's subsequent recounting of it to me, Kennedy did know more about the antiballistic missile than Teller, enough more so that Teller subsequently made a rather considerable effort to get himself up to date technically on these questions.

INTERVIEWER: Was this a problem of actual familiarity with the technology, or was it intelligence?

BROWN: No, it was a problem of familiarity with what were the fundamental problems, and what was the state of technology. This is not to say that President Kennedy was a highly qualified person technically, but he was very intelligent and very interested in technical matters, and was very interested in getting into considerable detail on some of these things. So that just knowing more science would not automatically qualify a technical person to come to a more technically sound conclusion than the President was able to come to. The President after all had access to quite a few people who knew the technology, and some of us I hope were able to explain the fundamental questions to him.

INTERVIEWER: Some points were made during the ratification of the Test Ban Treaty that Dr. Teller did not have the fullest intelligence.

BROWN: Yes, but that was really quite a separate matter. I think it is a separate matter from the question of what important questions are on

technology, what the important technical questions are in antiballistic missiles.

INTERVIEWER: His limitation was that he did not have access to this?

BROWN: Well, one limitation at the time he talked with the President was that he had not been paying very close attention to things which were not necessarily inaccessible to him because of their classification, but because he was not an

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antiballistic missile expert, and had not been working on it.

INTERVIEWER: Did Teller acknowledge this?

BROWN: I think he acknowledged it at the time of his conversation with the President, which was back in the beginning of 1962, if I remember correctly. But of course the Test Ban Treaty was signed and the hearings were held long after this in the summer of 1963, by which time I think he had learned quite a bit more himself. A lot had happened in the meantime. We had done atmospheric tests. They had done some more atmospheric tests. So the technical situation was different.

INTERVIEWER: If it is all right, let us run through some more of these telephone contacts, and then get back to these meetings, and leave these behind us.

BROWN: All right. I think that I have mentioned all of the telephone contacts I can think of. It has occurred to me that the F-105, F4H telephone call that he made to me was a day or two or three days after a dinner at the White House, at which on leaving I had mentioned to him that I might have been causing him some trouble that he didn't know about yet in the F-105, F4H choice that the Secretary of Defense had made, and he remembered this well enough several days later so as to get me on the telephone when he had this impending interview with Alicia Patterson.

INTERVIEWER: What was the dinner about? Was it a social affair?

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BROWN: No, this was a social dinner. It was a state dinner which took place, I guess, in February of 1962. It was a very large gathering.

INTERVIEWER: Did you attend many such functions?

BROWN: No, that was one dinner at the White House. I guess I was there for lunch, maybe, on other occasions. Then there was a dinner, which was a dinner *en famille*, at Palm Beach in the winter, December of 1960—1961, I am sorry, before the Macmillan-Kennedy [M. Harold Macmillan] meeting in Bermuda. Those were the only such occasions that I remember.

INTERVIEWER: What do you mean by a dinner *en famille*?

BROWN: Well, Mrs. Kennedy [Jacqueline Bouvier Kennedy] was at the dinner, and the President, and then the group that was going to accompany him to Bermuda.

INTERVIEWER: Did they talk about matters of state?

BROWN: They did at my end of the table. I don't know if the President did. I am not sure what went on at the other end.

INTERVIEWER: Okay. I would like to backtrack if possible now, and first of all begin with the circumstances surrounding your appointment, and then outline as nearly as we can the major issues on which you dealt with the President in meetings.

You were at that time 33?

BROWN: Yes.

INTERVIEWER: Was this something that struck you remarkably?

Was it a matter of some difficulty when you originally came into your job?

BROWN: Well, it was unexpected. My appointment was unexpected by me. The first thing I heard about it was when I spoke to Secretary McNamara the first time I had met him, and he asked me whether I was interested in taking the job over from Herb York [Herbert York], who had resigned, effective—well, I forget. This meeting was in February of 1961. It is true that my first reaction was, yes, I want to do this, but not yet.

INTERVIEWER: How long had you been director of Livermore?

BROWN: Just less than a year, and for a year before that, deputy director. But by the time I got back to California, which was a day or two later, I had pretty much made up my mind that it was not the kind of offer that I would turn down. It would be a place where I could contribute, that it was a stimulating and

interesting job—just how stimulating and interesting was impossible for me to realize at the time, but I was I guess clever enough to realize that it was those things. I don't think people on the outside can even begin to understand how interesting and stimulating such a job in that administration or this administration can be.

INTERVIEWER: You had had some familiarity with the Pentagon before?

BROWN: Oh, as a consultant, but I think it is that gulf that is not understood at all, no matter how dimly perceived

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by people on the outside.

INTERVIEWER: How did you get tagged for the job?

BROWN: I don't know what kind of investigation the Secretary of Defense had made. York I am sure made up a list, just as before I leave I will make up a list, go down it and tick off positive and negative attributes of the respective candidates. Then I know that he of course knew me very well. I had met Ros Gilpatric [Roswell L. Gilpatric] earlier in that same month, at the beginning of February, spent a day with him at a board of trustees meeting at Aerospace, so he had gotten to know me that well. I was a trustee, he was leaving. He was Chairman of the Aerospace trustees, and of course this was his last board meeting, since he had just been appointed Deputy Secretary of Defense. It was my first and very nearly my last—I think I had the shortest tenure as an Aerospace trustee of any of the people whom they have had, and they have had lots of people. Wiesner was a trustee. Jeeb Halaby [Najeeb Elias Halaby] was the secretary of the corporation, and so on. Anyway, I had spent a day with Gilpatric, so he knew me slightly, and I know that McNamara or Gilpatric or both had phoned around and gotten further advice.

INTERVIEWER: Were you a deserving Democrat?

BROWN: I may not have been very deserving; so far as active participation in political matters are concerned I am not much of anything, but I had always been registered as a Democrat. I am not sure anybody bothered to—I am sorry, that

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was checked on, but it wasn't particularly well known at the Pentagon. These nominations normally are checked by the—I guess they go to the White House and then the political side of the White House checks them out through the Democratic National Committee. They phone the locals. After the job had been offered to me, I got a call from Jesse Unruh [Jesse M. Unruh], who I had never heard from before. I guess he was Speaker of the Assembly in

California, and still is—I have since gotten to know him, and think quite highly of him—but at that time that is how I found out these things were checked through political channels.

I have since been involved from the other end, and found that they are always checked, but there are at least several Republicans at the presidential appointee level in the research and development part of the Defense Department, and although the question always gets raised, it has never been answered negatively, so far. I think that is quite a remarkable tribute to the way the Pentagon and the Administration have organized these matters.

Anyway, Jesse called me up and said, "I understand that you are going to Washington. We are very proud to know that one of our number has been chosen for that purpose." By that I knew that at least he had checked the registrations.

But when the announcement was made here, it was made—the early editions said that I was a Republican, because no one here bothered to check this, and they would ask someone who knew

me but did not know whether I was a Republican or Democrat. As a matter of fact, it was Jerry Wiesner, and he said I sounded like a Republican to him. So that they announced me as a Republican, and I somewhat indignantly got them to change the announcement for the later editions.

INTERVIEWER: When was the first time you met the President?

BROWN: I had met him in the beginning of February, I guess, at the first meeting I had attended of the President's Science Advisory Committee [PSAC], to which he had appointed me in January. But that was a very perfunctory meeting, although he was there for half an hour. I was very junior and I didn't say anything. I just listened to Professor Rabi [I.I. Rabi] talk about the great prospects of what later became the Conference on Technology in Developing Countries, which turned out to be less of a disaster than I had expected it to be. So I met the President on that occasion, but had had essentially nothing to say to him or hear from him of substance at that time.

INTERVIEWER: When was your next contact?

BROWN: That was the one I spoke about a while ago, in May of 1961, at which I met him in the role of the star performer at an NSC meeting on the nuclear test ban.

INTERVIEWER: You indicated that he was a little surprised at that point that you didn't come up with any recommendation.

BROWN: I thought he was surprised. I mean, he acted as if he kept expecting me to conclude my statement with the

position that we ought to resume testing. There was a moratorium on all testing at that time—and that our national security depended on that. I wasn't willing to say that, because I didn't believe it. I think that turned out to be characteristic of the Defense Department, that the Defense Department felt that it had to consider the national security rather than the military security. Those are not necessarily the same thing. And also I felt that—you see, as a laboratory director, I would have said from my viewpoint as laboratory director it is quite important and probably quite advantageous to the country to resume nuclear testing. I wasn't appearing as a laboratory director. I was appearing as Director of Defense Research and Engineering, and so my role was to lay out the facts. The Secretary of Defense was there, and it was up to him to say how this appeared from the point of view of the military security of the country.

INTERVIEWER: Had you checked with McNamara before you made your presentation?

BROWN: I told him roughly what I was going to say, but only very briefly. I don't think he had made up his own mind at that time as to what the situation was, and he was content to have this be an exposition of the facts. No conclusion was reached. I made no pitch. He made no pitch, and I think the President was content to regard it as merely an updating of the technical situation, from what he had heard

at the time of the Fisk Report, which was in February, three months before.

INTERVIEWER: The Fisk Report was a PSAC report?

BROWN: It was the report of a group named by the President, by President Kennedy, and run under the auspices of PSAC, but not all the members were PSAC members. That is right. There were Defense Department people and AEC people, and others. It has looked into much the same kind of question.

INTERVIEWER: In briefing the President throughout your three years of contact with him, or two and a half years, did you generally tend to make pointed conclusions, or try to stay off the definition of your own views?

BROWN: I gave my own views when asked, and sometimes I was asked.

INTERVIEWER: Did he instruct you to stay away from them as a general rule?

BROWN: It depended on the context of the meeting. When something had been or was coming up for the first time, I think everyone tended not to

come up with positions, State Department, Defense Department, AEC, others, but to say what they thought the problem was. After these things had been hashed over three or four times, and some of them were hashed over three or four, and some of them ten or twelve, he was looking for views, and when he was looking for Defense Department views, Secretary McNamara, if he were there, would

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give it. Sometimes he would ask individuals for their views.

INTERVIEWER: Did Kennedy really formulate the questions and the criteria, or did he throw the ball to you and say, "Answer it and give me your criteria?"

BROWN: No, he would generally ask specific questions. When he wanted a view, he would ask a specific question.

INTERVIEWER: Do you remember anything that illustrates this in particular?

BROWN: I remember one. Again it had to do with the nuclear test ban, I think. We offered the Soviets one last chance. This was after they had resumed nuclear testing. We said, okay, we will still sign the old treaty if you are willing. Before that formulation was reached, there was a meeting at which he asked people what they thought, and I remember there were AEC people there, State Department people, and Defense Department people. There were four of us from the Defense Department, McNamara, Gilpatric, myself, and General Lemnitzer, who was at that time still Chairman of the Joint Chiefs of Staff. He asked individuals, "If we can still get the same treaty we asked for before the Soviets started their atmospheric testing and if they are willing to stop their atmospheric testing right away, would you still go with the treaty?" It was that specific a question. And he started with the Defense Department people. He asked McNamara. McNamara said yes. He asked Gilpatric, and Gilpatric said yes. He asked me and I

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said yes. He asked Lemnitzer and Lemnitzer said no. But since the Chiefs' position from the beginning had been that we should resume testing whether the Soviets did or not openly, it was of course a presumption that they could be testing underground without our knowing—this was before they resumed in the atmosphere—this was not a surprise.

INTERVIEWER: That is a question that asks for a general conclusion in which you had to sum up a whole range of variables.

BROWN: That is right, and I think each of us did. I remember my own summation was that because the Soviets had tested in the atmosphere,

we had lost something militarily, that I did not believe that their tests so far could possibly have upset the strategic balance, that the example of a nuclear test ban, particularly one with inspection and concomitant opening up of the Soviet Union, outweighed any past loss in strategic balance that might have taken place. That, of course again, was in a very different context than the test ban that finally came about. The test ban that finally came about barred atmospheric nuclear testing, and so we didn't get in—there was no inspection agreement, but the agreement was such as to ban what could reasonably be controlled, namely, atmospheric—or detected, atmospheric testing.

INTERVIEWER: Did you feel on pretty solid ground in 1961 at the May 1961 meeting which you attended?

BROWN: Well, I knew what I was talking about, but I

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didn't fully appreciate the larger context at that time. I think that all of us who came from the outside inside, even those of us who had had some substantial exposure to information before, gradually came to believe that our position vis-à-vis the Soviets in strategic matters was very much more powerful than we had thought; that even though they had the power to destroy us, or would shortly, no matter what happened, our second strike capability was in very, very good shape. That is, we were rapidly losing a first strike capability, the ability to strike without taking substantial civilian casualties ourselves in the millions. The other danger, the greater danger that many people had worried so much so long about—namely, the loss of the second strike capability, or the acquisition of the Soviets of a good first strike capability, which is the same thing—the probability of that was so small, so very small that we could afford to explore lots of other avenues toward national security.

INTERVIEWER: Were you one of the people who was enlightened?

BROWN: Yes, very much so, but I think that the President was perhaps even more so. After all, it was his missile gap. There is another point here. I had had rather little exposure to intelligence information, but probably more than he as a comparatively junior member of the Senate had had, and this is an inference on my part—he must have been even more surprised. The intelligence information that became

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available during 1961 I think made this clearer and clearer. Although I think it was fairly clear to the Eisenhower administration [Dwight D. Eisenhower] in 1960, but they didn't quite know how to handle it in 1960, I don't think. They had evidence, but it wasn't conclusive, that the Soviets didn't have any ballistic missiles. This evidence I think became clearer in 1961—

or that they had a very, very small number of intercontinental ballistic missiles. They had lots of medium range ballistic missiles which of course could not reach us.

This was a subject that intrigued the President. It intrigued President Kennedy, the history of the missile gap and in this meeting—one of these meetings, let me see which one—the meeting in January of 1963 at the White House, finishing up the fiscal 1964 budget, he got to talking about the missile gap and said that it was very important to have a history of the missile as an example of how the administration in power, the Eisenhower administration, was unable to distinguish between—unable successfully to persuade the public of the difference that exists between possibilities and actualities, the difference between capabilities and actual or possible intentions and actual strength, which of course, that difference, if one reacts to the possibilities and not to the probabilities, or actualities, is likely to contribute to the arms race. The Eisenhower Administration was reacting to the right thing, but it wasn't able to explain to the public that

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it was reacting to the right thing.

INTERVIEWER: I am impressed at one of the things that McNamara has done most effectively, especially in his Economic Club of New York speech in November, which was to underline exactly how strong we were.

BROWN: Well, this was part of the same general thing. I think it is very important that the Administration not be forced into doing things that are against the real interests of national security because it has failed to make the case on which it has made its decision clear enough to the public, and therefore the public pressures it, in ignorance, into doing things that it should not do.

INTERVIEWER: How did you come about first realizing what the case is, and second, presenting it to the public over these three or four years?

BROWN: Well, this is something that I think Secretary McNamara is really the person to answer. I was only peripherally involved in it, and I can only talk about my own reaction. I think I realized it by greater and greater attention to intelligence information, which made the case clearer and clearer, and also one other thing, which I think on a couple of occasions I explained to the President. I became at this end of the line much more aware of the fact that particularly when both sides have large strategic forces, unbalancing changes are hard to make, not only because of the

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diversity of the forces, which make a technologically clever change on one side unlikely to affect all the capability of the other, but also because of the length of time that it takes to get something done. The time between a bright idea, or even a decision to go ahead with a system, and the subsequent development, testing, and large scale deployment of that system

is of the order of seven or eight years. It is this that turned the missile gap, which was a real gap of a kind which I will explain in a moment when it began, into a reverse missile gap in actual fact. When we started in 1954 our ballistic missile program, we were reacting to a very genuine lead on the part of the Russians. That is, the Russians had kept working on ballistic missiles, beginning in 1945 or 1946 when they took over some of the German work, and our Army, which had been working with it during the war, had dropped it, and the Air Force had not picked it up. So as of 1954, the Soviets had a substantial possibility of coming up with a system ahead of us. We started in 1954 to react to that.

By 1957, they were still substantially ahead of us in ICBM's. Let's leave out medium range ballistic missiles. So that they had their long range missile flights in the summer of 1957, and their Sputnik flight in the fall of 1957, and it was then realized that they could, if they wanted to—this is where capabilities rather than intentions come in—they could had they made this decision some time before 1957, and

we didn't know whether they did or not, have many ballistic missiles, ICBMs in 1960, at a time when we would have essentially none. So there was the missile gap. It was a potential gap.

The fact is that by the time the Soviets got any substantial number deployed in 1961 and 1962, we already had many more than they did, so that the gap got turned around, and the reason it got turned around is that it took them about eight years to do something, and we did it in six years, having started later than they did.

Now, it need not always work out that way, but the fact is that six months is not going to make any difference, or a year.

INTERVIEWER: Did we study in detail the cycling time in which the Soviets could deploy major weapons systems?

BROWN: I think we did, and I think perhaps not in enough detail. I think looking back, they could have deployed these in 1959 or so, but they did not, and I doubt that they could have deployed them in 1959 in large enough numbers to upset the balance.

INTERVIEWER: Why didn't they in 1959?

BROWN: Intentions are very hard to judge.

INTERVIEWER: Was it a matter of cost?

BROWN: Well, I am sure cost had something to do with it. I think in the event they decided they didn't want to deploy a very large number of very primitive systems, or very

vulnerable system. The first of anything doesn't work out too well. Our first liquid fuel missiles also I think are going to be retired because we don't think they are very good. I think they must have realized the same thing and decided, “Well, we will go for a later generation.” They did try to squeeze a great deal of political advantage out of the missile gap by confusing an actual capability against Europe, which they had, with a possible capability against the U.S. which they did not have, and associating both of them with their space success which they had had.

INTERVIEWER: Was there any explicitly formulated jealousy about how well the Soviets had parlayed what they had into a bigger thing?

BROWN: What do you mean?

INTERVIEWER: Did the President talk about that?

BROWN: You mean how they managed to pull that off? No, I never heard him talk about that. I think the comments I heard him make on this occasion that I speak of in January of 1963 had to do with the importance in a democracy of the administration being able to say enough so as not to be either stampeded into something, or losing an election because of a failure to make the actual situation known.

INTERVIEWER: Was he chagrined, then, that he himself had been such an obvious dupe?

BROWN: I don't think he was a dupe. I think the

reaction that he exhibited on this occasion, which of course is two years after the event, was that he was going on the basis of what the Eisenhower Administration said. The Eisenhower Administration said there was a missile gap. McElroy [Neil H. McElroy] had gone up and testified to this effect before the Congress, and he had been exploiting this. Now, there were some of his advisors who knew better, such as Wiesner, and others who did not know better.

INTERVIEWER: Did you ever participate in the Gaither Study?

BROWN: No, I was not a member of the Gaither Group. I knew some of the things that went on. But again, the Gaither Study considered potentialities, rather than made predictions.

INTERVIEWER: Kennedy was opening himself up then to really being faked out, if the Eisenhower Administration had chosen to act upon the indications that

you say they had.

BROWN: No. I think that they, themselves, were unable to make a clear distinction between potential and likely events. They were acting on what they believed would be enough, but they didn't have a clear picture of what the probabilities were of the Russians doing one thing or another.

INTERVIEWER: Is this because we haven't formulated a clear picture, because our services…

BROWN: I think the fault was in the Defense Department and the White House, both. I am sure we still have similar faults, but I think we have learned something since then.

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In any event, on this occasion the President urged that a history of this be written, and when we came back, McNamara told Adam Yarmolinsky to write one. I don't know whether Adam ever did.

INTERVIEWER: The dawning on him of the real capabilities must have been a time of great excitement, and then there must have also been further excitement in really laying out how we would go about changing the image. Did you participate in any of that?

BROWN: That must have happened in the early months of 1961, at least the beginning of it did, before I arrived on the scene, and so what I saw were the effects. I saw at budget meetings in 1961, which took place in November, his feeling that we should not react to potentialities but only to the likely Soviet force levels. He kept saying—he asked how much is enough, and although I think he had a very much more sophisticated understanding of this than some of the people on the outside who asked that same question with a very different answer in mind, he tended to consider that we should hold these things down to what we needed.

INTERVIEWER: Why was he looking toward the likely force levels? Because he wanted to limit the amount of force that was developed?

BROWN: No, I think—well, first of all, expending more on our own force levels than is justified by the Soviet's

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likely force levels, expending what is justified by their possible force levels, is very expensive, and he thought there were better uses for that money, both in the military field and non-military field. And conventional forces, for example, although on more

than one occasion I heard him voice his unhappiness that military money was so much easier to come by than money aimed at economic betterment or social betterment, or foreign aid, for that matter. That is one reason, and the other reason was arms control. I am sure both of those things entered into his mind.

INTERVIEWER: Do you have any feeling for how sophisticated his views were in 1961?

BROWN: When he arrived?

INTERVIEWER: And whether they changed?

BROWN: Well, by the fall they were quite sophisticated, I thought, but as I say, I was much less privy to what went on in the early months of that year.

INTERVIEWER: He was fighting against the after-Cuba psychosis at the same time as these revelations were coming out.

BROWN: Yes, but I think what Cuba persuaded him of was that although our nuclear capability or strategic capability was not going to win all of the things with which he would be faced.

INTERVIEWER: So this led him more toward the first justification of the real balance of forces.

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[TAPE CHANGE]

Okay, we were tracing the realization on Kennedy's part of our capabilities and development of psychological strategies following from them.

BROWN: Yes. On numerous occasions, he had a favorite question that he would ask, to which he knew the answer. As people talked about the possible needs for hundred megaton bombs, or as I, for example, would urge the development of penetration capabilities so as to be sure that we could saturate Soviet defenses, or whenever the general question of destructiveness of nuclear weapons came up, he would ask in a seemingly innocent way, “How much was the yield of that bomb that was dropped on Hiroshima?” He knew the answer, but he would get the same answer every time. This was for the purpose of calling to the attention of other people that a 20 kiloton bomb could do a great deal of damage, so that at some point you were reaching the law of diminishing returns on yields and numbers of weapons, providing that you got through. Of course, I think he always realized that you had to survive and you had to penetrate, and a number of us kept telling him this, just as he was telling us something we knew, to make sure that the whole picture was appreciated. But he asked this question at least on three or four

occasions that I remember where people knew the answer and he knew the answer, and this was his way of reminding them that quite a lot of damage, probably enough to deter, could

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be done by a comparatively small number of weapons providing that they survived and reached their targets.

INTERVIEWER: Did the veils fall away all at once?

BROWN: On his part? I saw an increasing awareness of this between, say, May or June of 1961 and November of 1961, but I think he was already fairly aware of it by May, and by December he understood the problem, I thought, very well. I remember one other occasion when something like this came up. There was a meeting at the White House to talk about the hundred megaton bomb. When was this? This was—I think this may have been in the summer of—no, I just don't remember which of these meetings it was. It was an afternoon meeting, perhaps in the summer of 1962. These same problems kept coming up over and over again, so it is kind of hard to tell which date it is by which subject it is. It was a fairly informal meeting, and as he left the room, he said—well, we had been discussing the question of where one might test a hundred megaton bomb. I had pointed out that it would be very hard to test, even if you decided you were going to build one. As he left the room, he said, "Well, I know someone who I know would be willing to test one, and I even know where he would be willing to test it." Without naming any names, I think he was making it clear who he was talking about. He was talking about General Power [Thomas S. Power] and he was talking about Moscow.

But he never seemed to me to have any doubt about

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his ability to handle or to assert civilian authority over the military. I think he made it clear that he wanted his military people to be aggressive in the sense of being willing to do what was necessary if it were necessary, but that he had no doubt of his ability to control them.

INTERVIEWER: Was any lack of control a factor in the Eisenhower Administration, tentativeness about how capable we were?

BROWN: I don't think there was any lack of control in the Eisenhower Administration so far as military operations were concerned. I think that there may have been greater difficulty in controlling the ability of the military to get development programs in, and perhaps a certain lack of ability to control expenditures on particular programs except by an overall budget level. I was outside, and so I don't think I can make a fair judgment. I can only give an impression, and my impression was that the Eisenhower Administration would say, "Well, most of this military expenditure is nonsense anyway. It is very important to have a massive retaliation capability, and so long as that is run right, it doesn't matter what you have in the way of anything else. So what we will

do is set a limit, a fiscal limit, and let them spend the money the way they want." That I think was the White House attitude. Now, I think that Secretary Gates [Thomas S. Gates, Jr.] and Secretary McElroy, as well, did try to make some more detailed decisions, but not quite the way

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McNamara and his band have.

INTERVIEWER: In the Kennedy Administration, how did the military react to the political people and the President's tendency to look to likelihood rather than capability?

BROWN: Well, I know that some of the Air Force people were very upset, and three years later a good many of them still are. But I think that there has been a growing awareness on the part of many of them that they have to meet this argument and this approach on its own terms.

INTERVIEWER: Was the argument ever joined?

BROWN: I don't know whether it was joined specifically on this issue. What I am referring to is the requirement to meet an analytical approach with an analytical approach of their own, and they now do that, not always successfully, not always well, but sometimes well, and sometimes successfully.

INTERVIEWER: Well, this tendency, then, if you treat it as characteristic of Kennedy, began to influence his major decisions on procurement. Did it influence the weapons testing area? Did it influence his interest in disarmament?

BROWN: Which tendency?

INTERVIEWER: The tendency to look toward likelihood rather than potentials?

BROWN: Oh, I think so. I think the famous Khrushchev [Nikita Sergeyevich Khrushchev] speech convinced him that the likelihood was that we

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would be faced with counterinsurgency actions, and the possibility of large scale conventional war.

INTERVIEWER: Which speech is this? Do you recall when?

BROWN: The January 1961 Khrushchev speech outlining the various kinds of

war. We did have to have a deterrent capability, but if it were not used, and if both sides were able to deter the other from all-out thermonuclear war, then the other wars became more likely. So that the result was that the Kennedy Administration, (a) actually increased over the short run, for the first couple of years, the expenditure on strategic weapons by accelerating the Minuteman production capability, and expanding the improved Polaris program, so as to be sure of having a survivable second strike force, but expanded the conventional weapons capability by an even greater amount, and paid much more attention to the efficiency of the general purpose forces, which in my view had hitherto been allowed to languish, since we had a thermonuclear capability, and nobody thought we would have to use anything less.

INTERVIEWER: When did the term "general purpose forces" come into use?

BROWN: Well, they showed up in the 1961 program package, but limited war is another use.

INTERVIEWER: Was that in the Eisenhower budget?

BROWN: No, in calendar 1961 they showed up in the formulation of program packages, which were set forth by Charlie

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Hetch. I don't know who invented it. I think it may predate that time. I think early in 1961, people used limited war or tactical war. The tendency now is to use general purpose forces, because limited war has a bad name, given it by those who believe that there is no substitute for victory, and limitation is the opposite of victory. Tactical warfare is another alternative term which is sometimes used.

A third thing was the third area, to which quite a lot of attention was paid during 1961, the counterinsurgency capability. I know that in the case of Research and Development when the fiscal 1963 budget was formulated, this was in October and November of 1961, we put in $100 million which we told the Army they could have included in their budget if they came up with $100 million worth of R. and D. program specifically applied to remote area limited war, or counterinsurgency, if you want to call it that. They came up with a program, of which I think only—well, much of it was also applicable to higher levels of conflict, that is, general purpose, but also had enough application to remote area limited war, so that we left in the $100 million.

In effect, I would say that about thirty or forty million of that really was principally aimed at remote area limited war. That amount has gradually grown until throughout all of the services. It is about $130 million in the fiscal 1965 budget.

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So I think this awareness had a big effect, although an expansion took place in all of the Defense budget over the first couple of years, not just the general purpose forces. It took

place in the strategic forces, as well. It is only in the last year, going from fiscal 1965 to 1965 that there has been a fall-off of the investment in strategic forces.

INTERVIEWER: From what point does Kennedy's interest in counterinsurgency date? From the Bay of Pigs crisis?

BROWN: I don't know. I really had very much less to do with him on those matters, so what I saw of what he was doing there came filtered through one or more intermediate levels. The Attorney General, of course, Bob Kennedy [Robert F. Kennedy], took a very active role, and although I guess I may have been at one meeting of the special group CI, a number of my people have presented the research and development program on CI to that group a number of times.

INTERVIEWER: When was that group organized?

BROWN: I think it was in 1961, but probably after—well, I know it was after the Bay of Pigs.

INTERVIEWER: I would like if we could to summarize the strategic concepts that Kennedy seemed to be committed to in early 1961, and then to move to see if there were any changes which took place between then and 1963, just seen from the Defense side, rather than from the side of arms control.

BROWN: I think in 1961, early 1961, he was still

becoming aware of the enormous strategic strength which we had, and which we were going to have, and the still greater strength and certainty of second strike strength, which we were going to have.

INTERVIEWER: It was a great disparity, I gather, in 1961.

BROWN: Between our existing second strike strength and our projected second strike strength. But the Soviets also had rather little first strike missile capability, so it didn't seem quite so important then. He did, therefore, act to build up our second strike capability very, very rapidly, although it had already been projected to build up rapidly in Polaris and Minuteman. He built it up faster.

I think that he then, even at that time, was able to foresee a gradual stabilization of the strategic situation. His subsequent attention, therefore, in the strategic area seemed to me to concentrate on things that might unbalance the strategic situation, and for that reason he took a very special interest starting in the fall of 1961, in the antiballistic missile program, and the antiballistic missile question, as being the single thing that was most likely, although not very likely, as I think, to unbalance the strategic situation substantially.

INTERVIEWER: Did he desire a stable deterrent, or was he ever interested in the prospect of the U.S. breaking…

BROWN: Well, I think on several occasions he asked

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about a first strike capability, and whether it was feasible. The question of whether it was desirable as well as feasible, his interest in that question was much less clear. He may have decided in his own mind that the combination of feasibility, desirability, and usability were small enough that it was not worth having. These things are not sharply defined, of course, what you have got in retrospect, and I think we know a lot more about this now in 1964 than we did or anyone did in 1961.

It seems clear that there are really two things. There is assured destruction capability and there is a damage limiting capability for each country, and the number of casualties we can inflict on the Soviets depends on our assured destruction capability and their damage limiting capability, and vice versa, the number of casualties they can inflict on us depends upon their assured destruction capability and our damage limiting capability. In extreme form, these are first strike and second strike, that is to say, the first strike capability is that of being able to have assured destruction yourself, and being able to limit your own damage to a rather small amount.

INTERVIEWER: I am under the impression from looking at some of the supporting documents that the assured destruction capability was not explicitly repudiated by the United States until some time in 1962.

BROWN: Well, I don't think we ever have repudiated what I mean by assured destruction capability. Assured

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destruction capability as I use it means assured destruction of population. In other words, what you might call a second strike capability against the Soviet population. Because no matter what they do to us, no matter what they build in the way of ballistic missile defense for example, and no matter what they are able to do in the way of destroying our missiles on the ground, we want to preserve an assured destruction capability. The residual that survives the first strike, and penetrates their possible defenses should have the capability of destroying X percent of the Soviet population and industry, whatever is enough to destroy them as a society.

INTERVIEWER: At what point did we conceive the concept of a damage limiting strategy and begin to adopt it?

BROWN: I don't think we have adopted it, really. If we had adopted it, we would have civil defense. But at least the administration adopted that part of

it in the fiscal 1963 budget which it submitted at the beginning of 1962. That took place or that happened during the budget formulation for fiscal 1963. And I think it follows from the conclusion that if a war happened, spending or having spent $5 billion on civil defense would for a given Soviet attack save 40 million U.S. lives. Now, that is damage limitation of a kind. In fact, it happens to be the first stone in the damage limiting edifice. But I think our understanding of it was comparatively unsophisticated. I believe it first began to be clearly laid out

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in the memoranda to the President on strategic and defensive forces, which were prepared in connection with the fiscal 1965 budget, and which were to be discussed with the President the day after Thanksgiving of 1963, just one week after he was assassinated.

INTERVIEWER: There was a strong endorsement also of the damage limiting concept in the fiscal 1964 preparatory papers.

BROWN: Yes.

INTERVIEWER: Seeing those, and then seeing the fiscal 1963 papers, it seems to me to be a big…

BROWN: A big change there; I think that is right. But as I say, the first stone was laid in the civil defense presentation, the decision which was made in December of 1961, I think, when the fiscal 1963 budget was made. By the time of the fiscal 1964 budget, the words “first strike” and “second strike” and “civil defense” and “Nike-Zeus,” the decision was made again, then, and how many people it would save, how much damage it would limit became clearer, much clearer. In the memorandum to the President in the 1965 budget, I think the words “damage limitation” as such, “assured destruction;” “damage limitation,” begin actually to be used in the present meanings, and I think since that time, and I think this will come out very clearly in the fiscal 1966 letter to the President [Lyndon Baines Johnson] on strategic and defensive forces which will come out in October, November or December of this year, there will

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be a complete rationale on analysis.

It is fascinating how year by year we were adding at the highest levels, the Presidential level, the understanding of these things, just as we learned about them ourselves, and of course I very much hope that this can continue.

INTERVIEWER: Primarily through the mode of the budget.

BROWN: Primarily through the mode of decisions on the budget which were presented, however, as programs.

INTERVIEWER: Was this considered a unique departure or was it an extension of things begun under the Eisenhower Administration?

BROWN: Well, of course, there have been budgets even before then.

INTERVIEWER: But the reliance on the budget as a set of benchmarks.

BROWN: Oh, that always was the case. That always was the catalyst. You have to make your hard decisions then. That has always been the case. I think the difference is that there is now, or I think there is more continuity now between one year's budget and the next, because each looks five years ahead.

INTERVIEWER: That was a McNamara innovation?

BROWN: Yes.

INTERVIEWER: In what sense do they look five years ahead?

BROWN: Saying how much decisions will cost you over

the next five years if you make them now. Again, I am sure that is not a discontinuity. I am sure people did that before. But I don't think they did it so methodically. I think that the main difference is that we understand, that we have a rationale for what we are doing that we try to extend over a longer period. I hope that it is more than a rationalization. Some people might accuse us of that.

INTERVIEWER: At what point was the development of five year force plans undertaken?

BROWN: Late 1961. I don't think they turned up for the 1963 budget, but they did turn up for the 1964 budget.

INTERVIEWER: Did these have a direct integration with the annual budget for 1964?

BROWN: In making up the annual budget, one begins with the force structure and financial plan which have been projected the previous year. In other words, it is a point of departure.

INTERVIEWER: At what point, too, did you start using the yardstick of the number of casualties that both sides could inflict?

BROWN: I think that was pretty clearly a yardstick by the end of 1961. I find it

very likely that it was a yardstick at least in some—well, I know it was a yardstick in some studies before then. It was a yardstick in the Gaither Report, which after all was 1957.

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INTERVIEWER: How did the military react to this yardstick? Did they see it as too conservative?

BROWN: I think they have always tended to think in terms of residual forces as well. I know they don't discard civilian casualties as a yardstick, but I am sure there was a tendency to believe that if there had been a hundred million civilian casualties on each side, and one side had 500 missiles left, and the other had 200 missiles left, the first side had in some sense won.

INTERVIEWER: Have they generally tended to have a feeling or did they initially, subject to later correction, that the shortest margin was to advance technology as far as you effectively could?

BROWN: Yes, I think they believed that. I think to an extent all of us still believe that. The difference between advances in technology and new departures in technology I think was perhaps not very well understood. I think that it may be better understood now.

INTERVIEWER: How do you think the President considered this criterion for decision?

BROWN: Which criterion.

INTERVIEWER: That one should go as far as one practically could.

BROWN: I think he recognized that ability to do something was not sufficient justification for doing it, that it

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had to contribute in some measurable way, if one was talking about a big engineering system, a system that would cost hundreds of millions to develop and billions to deploy, the fact that you could do it, and that it was in some technological sense superior was not a justification for doing it. To take an example, Skybolt is one such example. He was not convinced that it ought to be done because it could be done, although here of course, he was relying on the Defense Department's advice when he cancelled it.

Another example outside of the Defense Department was Rover. The trip that we took in December of 1962 to Los Alamos and the Nevada Test Site to look at the Rover Program, among other things, did not persuade him, although he heard many arguments from AEC people and NASA people that here was a new technology, did not persuade him to increase

the Rover budget, which is what they were trying to do. They were trying to get him to increase it from $200 million to $400 million per year. It later turned out that would have been unjustified even on the basis of the technology, because a few months later the technology fell on its face.

Since then, of course, President Johnson has reconsidered it and concluded that even the $200 million level was higher than one needs, even though one can in principle solve the problem. It does not meet a requirement which billion dollar systems ought to be made to meet.

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INTERVIEWER: The other thing I would like to ask in this context is what the President's response was and what his views were of the notion of a controlled conflict.

BROWN: My impression was that he was dubious that at the thermonuclear level conflict could be controlled, but that he felt we ought to look into it more carefully, that is, we ought to see whether it was feasible, although I think on numerous occasions he had doubts that it was feasible. I think on at least some occasions he was purported to say, and I think I may have heard him say that if we or the Soviets start firing thermonuclear weapons, that would probably be the end, and he didn't particularly want to survive it.

INTERVIEWER: Well, how could he justify expenditures for command and control?

BROWN: Well, there are two kinds of justification for command and control. One of them is that you want to be sure that people get the word to do everything, despite all attempts to knock out the command and control system. This I think is what many military people have as their justification for elaborate command and control systems, not to enable various degrees of withholding to take place, but as insurance that nobody fails to get the word to go. I think that is one justification.

The second justification is that you want to control the conflict at every level, and one can spend very large

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amounts of money…

INTERVIEWER: To prevent it from escalating?

BROWN: Well, to the maximum extent possible to prevent it from escalating.

INTERVIEWER: Escalating intentionally or unintentionally?

BROWN: To give the other side every reason to believe that what happens to

them is very closely connected with what happens to us, in such a way as to urge them to keep their attacks down. You see, in a rational situation, destruction of U.S. population does not reduce Soviet casualties. What one can do, what one would like to do is to convince them that if a war somehow starts, however it starts, U.S. command and control would be very tight, in that it is only as their attack builds up against U.S. populations and command and control systems that U.S. strength will be used more and more against them. So that the way to reduce Soviet casualties is not to induce too great U.S. casualties.

Now, I think that there must always be very legitimate doubts on everyone's part whether in a situation where tens of millions have been killed on both sides, it is very likely for even a very minor nuclear exchange that people are going to think rationally, behave rationally, have enough time to reach these conclusions, and so on. I am sure that President Kennedy recognized this difficulty. But I believe he was willing at least to go along and see whether one could construct a model

and conceive of equipment and procedures that would make this kind of a war more likely to be possible, if war did start. I think that we are losing—I believe, however, that that is only a part of the command and control situation, and the hardest part. Command and control and controlled response even in a thermonuclear war may be possible, but it is clearly very difficult. It is also very important, so it is worth working on. But command and control and controlled response applies even in a conventional situation, even in a cold war, and a war where people have not started firing yet, in a war where they have started firing but they haven't started firing nuclear weapons yet. Command and control and controlled response is very important there. I think the Cuban missile incident is a perfect example of that.

INTERVIEWER: Did the President have greater interest in command and control for these purposes than he did in the event of a thermonuclear war?

BROWN: I don't know. I can't make a judgment about that.

INTERVIEWER: What you are suggesting is that he really believed that our system should be as fragile as possible as a deterrent to…

BROWN: No, I am not saying that. I don't think that is—I am not saying that and I don't think he was saying that, because if you make it as fragile as possible on the basis that if they do anything, all-out war follows, and they get wiped

out, then you are depending upon them to get that message and act upon it. What you are saying is that we are not going to have any small accidental wars. In other words, it is a way of playing Russian roulette, in a way. Certainly when you look at the behavior in the Cuban

incident, you don't get that impression. After all, we could have gone in and tried to destroy the missiles. We could have landed troops right away. That I think would have cleared up the situation, but it would have risked Soviet action at a still stronger level. It is what we would have done had they not responded to our very carefully graded pressure of the blockade, with a clear implication that the next thing we would do would be what I just said.

But what that did, you see, we took action on one level, and threatened escalation to the next level, a level at which we could be sure to win, which would have put the ball in their court, and would have put them at a level such that to escalate it even further would have created a very, very grave risk of thermonuclear war. They decided, faced with this alternative, that is, withdraw your missiles or be faced with an invasion and destruction of the missiles in Cuba, and then withdraw much more ignominiously, or else escalate to a place where there is an immediate danger of thermonuclear war; faced with that alternative, they backed out at the lower level rather than be confronted at a still higher level with a situation where they either had to back down again, or get up

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into the thermonuclear war threat.

Now, that, it seems to me, is a very good example of command and control, and controlled response, which required the most precise kind of control over our forces, and the most precise method of communicating messages by actions.

INTERVIEWER: Are you stating a subsequent rationalization or was this the plan?

BROWN: No, I am convinced this was a plan in advance. And it is just an example of how one can use controlled response even in the absence of a thermonuclear war.

INTERVIEWER: What had we done prior to October 1962 which made it feasible?

BROWN: Which made it feasible? Well, we had done a number of things. First of all, we had created the conventional forces that allowed us to make this threat with some chance of believability. In 1960 or 1961, it is not at all clear to me that the Soviets would have been convinced that we could have successfully invaded Cuba in a quick enough time to put the ball on their course. After all, this was the failure of the British and French in Suez; given their decision, right or wrong, to invade, and then do it unsuccessfully is the worst thing you can possibly do. So this was the first thing.

The second thing was improvement of communications and command from the President, through the Secretary of Defense to individual units, so that one was able to control the blockade

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that carefully, for example.

INTERVIEWER: Was that well done?

BROWN: I am sure a lot of military people believe that circumvention of what would be the normal channels of command in a shooting war was a mistake, but I think they missed the point.

INTERVIEWER: Are you prepared to elaborate on that?

BROWN: I don't think I should. I am not sufficiently well acquainted with it to speak from personal experience.

INTERVIEWER: How did we enhance our communications prior to October 1962?

BROWN: I think there were a number of physical things that were done, but I do not know them in detail.

INTERVIEWER: Were there other things that were specifically done which had this desirable effect?

BROWN: I think the readiness of forces had been improved. You see, call-ups had been made as a result of the Berlin crisis, for example, which were still in effect.

INTERVIEWER: By this time, how secure were our retaliatory forces?

BROWN: By the fall of 1962, we had some Minutemen, a good number of hard Atlases. The number of B-52's on 15 minute alert had been increased to 50 percent of the force. The BMEWS, the ballistic missile warning system, was operative. Of course, that was a consequence of a project, that last was a consequence

of a project started during the Eisenhower Administration.

INTERVIEWER: In the case of the B-52s on alert, was this a regular thing?

BROWN: That was a Kennedy decision implemented in 1961.

INTERVIEWER: Were there further increases during the period of tension?

BROWN: Oh, yes. During the period of tension, SAC [Strategic Air Command] was on a DEFCOM-1 status, which increased the fraction on air alert, and also increased the fraction on ground alert beyond the 50 percent, which was the status that had been gone to between the accession of this administration and

1962. I think it had been 33 percent before. So there was zero doubt about our second strike capability.

INTERVIEWER: I want to ask two more questions before we finish this. One is what were the lessons bearing on force levels and kinds of forces that we derived from the October 1962 crisis? What further things did we do?

BROWN: I think that the October 1962 crisis made it clear, first, that intelligence is extremely important. Just a few weeks difference and the Soviets would have had those missiles there, and it is not clear what the outcome would have been, except that it would have been different. This is not to say that having gotten the missiles in without our finding out, and ready without our finding out about them, would have changed the strategic balance, but it would have changed

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the political situation and the psychological situation. So that I think that is something we have learned a lot about, and I think that over flight intelligence of various kinds, aircraft, satellite, is now understood to be an extremely important part of national policy. It was understood before, but I think it was emphasized by that.

Second, I think it reiterated the importance of having conventional forces which could be applied in a situation short of thermonuclear war. Most of the Marines were in a position to participate in an invasion of Cuba, and it is recognized that that has a very important impact.

I think those are the main defense lessons that I would draw.

INTERVIEWER: Can you mention what was done following from the Cuban crisis?

BROWN: Well, you remember the Hot Line; that was put in. I think establishing a secure channel of communication with the Soviet Union was considered to be extremely important, because you will remember that at one point there, we were getting one story from letters from Khrushchev, another story from Moscow Radio, and many people interpreted this as some kind of internal struggle going on there, which may have been the case, but if you have got garbled communication channels, different time delays, and reliabilities, you can get into lots of trouble. That is one thing we learned.

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INTERVIEWER: Can you recall any specific trouble that came?

BROWN: From what?

INTERVIEWER: From the communications problem?

BROWN: Well, I think that there was a very severe confusion on Black Saturday.

INTERVIEWER: Were you a party to it?

BROWN: No, I learned about it afterwards.

INTERVIEWER: Were you party to any of this at that time?

BROWN: I was involved indirectly in some of the technical features of the over flights, such things as—well, I know for one thing I urged some low-level over flights, and for another, there was a question of particular equipment, photographic equipment moved from one place to another, that kind of thing.

INTERVIEWER: At what point? You mean after the original discovery?

BROWN: That was after the original discovery, and before the end of the crisis on that Sunday. The discovery I guess was the week of October 11, between Monday and Friday, and then the speech was made on Monday, and then there were continual over flights between Monday and Saturday. Saturday the U-2 was shot down, and it was not clear which way things were going to go. Sunday the Soviets backed down.

INTERVIEWER: Was there any equipment that was

experimentally employed, specifically?

BROWN: I am trying to remember. I think that we did get some Air Force equipment and stuck it on Navy aircraft, or vice versa, Navy equipment that was in an experimental stage and stuck it on Air Force aircraft, to take pictures.

INTERVIEWER: The knocking down of the U-2 was a specific gambit of the Soviet to your knowledge?

BROWN: It is not clear. I think that this may have been an unauthorized act, but I am not sure. They were tracked, clearly tracked. I can't tell. I am not sure that it is known. It was clearly deliberate on somebody's part, but what level of deliberation is not clear. The fear, of course, was that it was deliberately ordered from Moscow. I think subsequent events cast some doubt on that. But I am going on partial information.

INTERVIEWER: You mentioned a minute ago that the President conveyed to you the feeling that if it ever came to thermonuclear war, he would rather not

survive. Could you amplify on this, and give me some feeling for what kind of…

BROWN: I think he was speaking as a person. I think that he recognized that as President the situation was different.

INTERVIEWER: What kind of expectations do you have for how he would respond in the event of a thermonuclear war?

BROWN: My own impression was, and it was purely an

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impression, it is nothing I ever discussed with him, that he would do what had to be done, that he would consider it the ultimate catastrophe, but still necessary. I don't know how else a president can feel.

INTERVIEWER: Do you have any specific indications, any recollections?

BROWN: I do remember in another connection his saying—this was in December of 1961, right after his own father had had this stroke, again at a social occasion in Palm Beach, and Dean Rusk asked him how Ambassador Kennedy was, and he said, “Well, he is alive, but that is about all.” Then subsequently in the conversation he indicated that when he went, he wanted to go quickly, and did not want that to happen to him. This was not talking about thermonuclear war, at all, but I have the impression that he felt the same way about thermonuclear war.

I think also, by the way, that towards the end of his administration he had decided that thermonuclear war was not going to happen deliberately on anybody's part, that it could conceivably happen accidentally, but that it was very unlikely, because people who had big thermonuclear forces knew how important it was to control them, and were taking very, very strong actions in that direction, both in the Soviet Union and here, so that it was going to remain—I don't want to say a bluff, because I don't think he felt that way, nor do I feel that way, but it was going to remain something that had a very

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small chance of being used, that you could not let it run down, because neither side was going to use it under any reasonable circumstances, you couldn't count on it to help you in anything else. You could not count on your capability to help you in anything else.

INTERVIEWER: Did he ever give any indication of how he might respond in terms of preferences he had for elements of the command and control system?

BROWN: No. I mean I don't know enough about the conversations, such conversations which took place directly on this matter, and I think it is

very difficult to infer. He did approve the deep underground command center for inclusion in the budget, despite the fact that he had indicated that as a person he had no interest in using it.

INTERVIEWER: How did he look on the generals who made it their business to think about using this?

BROWN: Well, he thought about it just as much as any of them.

INTERVIEWER: Did he have any personality evaluation of them?

BROWN: The only one I remember is the one I mentioned to you, General Power.

[END OF INTERVIEW #1]

Harold Brown Oral History Transcript – JFK #1
Name Index

Dr. Harold Brown's contacts with President John F. Kennedy

1961

November 22, 1961	3:00 p. m.	Appointment with the President
November 24, 1961		Was with official party who went to Hyannis Port to see the President
November 30, 1961	5:00 p. m.	NSC Committee on Atmospheric Testing met with President Kennedy
December 20-22, 1961		Was with official party on trip to Palm Beach and Bermuda with the President

Possible contacts: August 8, 1961 10:00 - meeting of National Security Council in Cabinet Room

November 2, 1961 10:15 - attended National Security Council meeting with Secretary McNamara

1962

February 2, 1962	4:00 p. m.	The President
March 2, 1962	4:00 p. m.	The President
March 22, 23 1962		Was one of official party with President visiting facilities on the West Coast
May 4, 1962		Was one of official party with President visiting Eglin Air Force Base
May 8, 1962	5:00 p. m.	The President with Dr. Johnson and Gen. Decker
June 5, 1962	5:30 p. m.	White House with Mr. Gilpatric
September 11-12, 1962		Was one of official party with President visiting Cape Canaveral, Houston and St. Louis
November 23, 1962		Was one of official party who went to Hyannis Port to see the President

December 5, 1962 10:00 a. m. President Kennedy with Secretary McNamara

December 7, 8, 1962 Was one of official party who went to Nebraska, New Mexico, Arizona and Nevada with the President

Possible contact: September 6, 1962 10:00 National Security Council

February 27, 1962 10:00 National Security Council

1963

September 9, 1963 10:00 President Kennedy with Secretary McNamara

Possible contact: August 7, 1963 8:30 p. m. Situation Room, White House

August 8, 1963 2:00 p. m. Situation Room, White House