By Marc Trachtenberg, David Rosenberg and Stephen Van Evera





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In the history of American nuclear strategy, Carl Kaysen played a unique and important role. An economist by training, he was one of the architects of the bombing campaign against Germany during the Second World War. He did some work for the RAND Corporation in the late 1940s and in 1951 took part in the important air defense study, Project Charles. A few years later he studied the vulnerability of the Soviet economy to American air attack for the Defense Department's Weapons Systems Evaluation Group.¹

During the Kennedy period in the early 1960s, Kaysen came to play a major role in policy making. He worked in the White House from 1961 to 1963, first on the National Security Council (NSC) staff and then as deputy to McGeorge Bundy, the President's national security advisor.

After leaving the White House, Kaysen worked for subsequent administrations as a consultant on issues of strategy and intelligence. Kaysen also taught political economy at MIT, and was a member of the MIT Security Studies Program (SSP). While at SSP he was an important mentor to many students and colleagues, and a key contributor to SSP seminars and group projects. He died on February 8, 2010, at age 89.

This article is based mainly on a two-part interview with Professor Kaysen which took place in his office at MIT in 1988. Marc Trachtenberg, David Rosenberg and Stephen Van Evera were the interviewers. The sessions were taped, and a transcript was prepared by Laura Reed. The tapes of the interviews, together with the full transcript, will be deposited at the John F. Kennedy Library in Boston. The article itself was prepared by Marc Trachtenberg. For the sake of readability, Kaysen's remarks were changed in some minor ways; comments made at separate points in the interviews, for example, were spliced together. But no substantive changes were made and to the extent possible Professor Kaysen is quoted here verbatim.

W hat is perhaps of greatest interest here is Kaysen's discussion of the issue of the predelegation of authority to order the use of nuclear weapons, his account of the 1961 "Rowen-Kaysen plan" for a counterforce strike on the Soviet Union, and especially his observations about the military's way of thinking and way of doing things.

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The first interview began with an account of Kaysen's experiences during World War II. How did he get into the strategic bombing business in the first place? When the war with Japan began, he said:

[In early 1942] I was a graduate student at Columbia and a part-time research assistant at the National Bureau of Economic Research in New York. Sidney Alexander, one of my colleagues at the National Bureau, had been recruited into OSS² Washington by Ed Mason, a professor of economics at Harvard, who had organized the Economic Analysis Division of OSS. And Sidney recruited me. The war had started, I was a restless young man, so I finished the particular job I was working on at the Bureau and I went to Washington in about May of 1942.

I worked on miscellaneous things. I became a railroad expert. I did an analysis of the capacity of the Manchurian railways to sustain a Japanese defense against a Soviet attack in the Far East. I got fairly heavily involved in a fascinating effort that was organized by a man named Eddie Mayer who had been a petroleum geologist, to make estimates of the supply problems of the German army in the Soviet Union. Using all kinds of data, taken from Army field manuals, from World War I experience, this group of about four or five people constructed a great big matrix which showed various kinds of fighting, rapid advance, static defense, heavy fighting, and so on, and estimates of the tonnage of food, ammunition, POL, spare parts, and so on, that would be consumed by the different sorts of German divisions there in a day under these various conditions. On the basis of that and the railroad maps we were able to predict and did predict that the Soviets would win the battle of Stalingrad. Now, if they had lost, we wouldn't have predicted it. What we did say is that the Germans were going to have a terrible supply problem, and that the single rail line that they possessed in this salient simply wouldn't be able to produce the things that they needed to sustain their advance. All of this made use of my training in quantitative work.

There was another way in which Kaysen's background in economics was relevant.

I would say that the most important idea that as an economist I had, all of us economists had, which wasn't in ordinary military thinking, was the idea of substitution. If you take the whole strategic materials business, we were among the first people to see through the argument about "strategic materials" and say this was going to be crap, because they'll find ways around it. Some engineers understood that too, but most military men didn't.

It was believed, for example, that ferro-alloys of certain sorts were extremely important for making hardened steel. We had two preclusive purchasing programs in which American agents bought wolframite from the Turks, and we also paid lots of Spanish farmers to go out in the hills and pick up certain

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The Office of Strategic Services, America's main intelligence agency during the war.

minerals which contained tungsten ores and so on. So we were preventing the Germans from getting these tungsten ores. But they just turned around and scratched their heads and got some physicists and metallurgists to work, and they invented a process called nitriting the steel which turned out to be just as good for certain purposes as having the tungsten. If you're an economist you're very much alive to this possibility and other training doesn't give it to you.

So I did a lot of miscellaneous things. At one point fairly early on, I got into a discussion of a paper that the British Chiefs of Staff had given to the American Chiefs of Staff about the British bomber offensive. This was a paper which showed that by destroying housing and so on, they were going to undermine the German productive process, they were going to destroy workers' morale by burning their houses down, or blowing them up, or whatever—mostly bricks so they blew up rather than burned down. There was a lot of criticism of that paper. There was some technical criticism. They didn't have the correct formula, for example, for allowing for the overlapping effect of bombs. There's a negative exponential that you have to put in there. Today, this is all very familiar in the targeting business, but it was then a new idea. But we also were very skeptical, and correctly skeptical, about the notion that this kind of bombing would do any good.

So I got involved a little bit in this business. Then the Eighth Air Force was sent to England. Mason and Emile Despres [Mason's successor as head of the Economic Analysis Division] went over to England and discussed with the Eighth Air Force the idea of having a unit that would sort of work for the Eighth Air Force and which would do two things: help pick targets and help assess bomb damage.

I was supposed to go as a civilian to this unit. But I had to ask for my draft board's permission which was not granted. So I asked to be called up. I was told to enter the service and they would arrange to have me go over there in the service. So I joined the Air Force, was sent over to London, and got a battlefield commission [at the American embassy] in Grosvenor Square. I went to this unit which was commanded at that time by Charlie Kindleberger.³ It had about 7 or 8 people in it, mostly economists. We did two things. We argued about what targets to hit, and we actually did a lot of intelligence. And I got into the intelligence business in a serious way. I trained for a couple of months to be a photo interpreter and because I was technically in the Air Corps I was cleared for Ultra.⁴ We relied mainly on three things: photo interpretation, the signal intercepts, and prisoner interrogation, which was very important. I actually participated in a few interrogations.

³ Charles Kindleberger joined the MIT Economics Department in 1948, eventually becoming Ford Professor of Economics. He continued to teach at MIT until 1981. In 1985 he served as president of the American Economic Association. During the war, he worked with the OSS and the Army, where he held the rank of Major, and after the war played a key role in the design of the Marshall Plan. On Kindleberger's wartime experience, see C.P. Kindleberger, *The Life of an Economist: An Autobiography* (Cambridge MA: Blackwell, 1981), chaps. 12-15.

^{4 &}quot;Ultra" was the term for intelligence derived from the decryption of German communications during the war.

A kind of theory of bombing—that is, a theory of industrial bombing evolved out of these arguments about which target systems to bomb. It was this theory that the Air Force essentially adopted. If you look at the first target lists of SAC [the Strategic Air Command], you see projected onto the Soviet Union what we had been doing in Germany, with a big role for oil and so on. Now, of course, our theory was evolved with due regard for the very limited tactical capabilities of what we could do.

During the war, the Air Force had this fantasy about precision bombing, which was invented in Texas where there is no opposition and the sun shines all the time. One of the things I remember from my World War II experience, if I have the number right, is that between October 1st and April 1st, there is an average of three clear days a month in northwestern Europe. But when we had good weather, and especially in 1944 when we had sort of beaten up the German Air Force and there was little resistance, the results could be spectacular. I can almost remember the dates: there were three Sundays in late April and early May when [General Carl A.] Spaatz [the U.S. air commander in the European Theatre], somewhat evading his orders, bombed German oil refineries, with terrific, I mean *terrific* results.

When we started planning for OVERLORD, the assault on the continent, we saw that the strategic bombing would be put on hold and we got into the tactical military planning business. The official air plan in support of OVERLORD had been worked out by the British, mainly by [Air Chief Marshal Arthur] Tedder [of the Royal Air Force], who was Eisenhower's air deputy. Solly Zuckerman [then Scientific Director of the British Bombing Survey Unit] had a big role in it.⁵ The Tedder Plan was very much attuned to the technical capabilities, or lack thereof, of the Royal Air Force and [Air Marshal Arthur] Harris [commander-in-chief of Bomber Command], and emphasized bombing marshaling yards and so on, which are big targets and fairly defined. Our theory placed very heavy emphasis on the sort of "time distance" from the battlefield, so that bombing steel plants was not a good idea because it was a year between the time an ingot went into a rolling mill and it appeared on the battlefield as a tank. And it's why oil was such an important target because the German oil supply was very tight and the inventories were low and so on. One of the great interrogation reports we got that we circulated endlessly around the intelligence community was of a German fighter airfield commander, a base commander, who had his Mercedes hitched to three horses, dragging it around the field because they had run out of gasoline for his car.

But to get back to the Tedder Plan: what we said was that this marshaling yard business was crap, because, in the first place, marshaling yards were easy to repair, and, in the second place, 70 or 80 percent, or whatever number it was, of railroad capacity was used to supply the civilian economy, and only 20 percent or so was used directly for troop movements and supplying the battle front.

They had a lot of squeeze, so it was a waste. So we worked up an alternate plan—we called it the "immaculate conception" because no on would sponsor it—and our target list focused on bridges, military depots, and things like that. Eventually General Cabell—Charles P. Cabell, Spaatz's Chief of Plans—sort of sponsored the plan, but we were trying to get Spaatz himself to sponsor it.⁶

A meeting was held with Spaatz, Cabell and a number of other Air Force generals. I was told I could come if I said not one word. I think it is literally true that the generals couldn't see a company grade officer. They probably thought I was there to empty the ashtrays or something. A fellow named Richard Hughes also attended. He was an Englishman, he'd fought in World War I, had emigrated to America in the mid '20s and somehow got into the Air Corps reserves and was called up as a colonel.⁷ He really was a terrific guy, very focused, very smart, he understood what we were doing, he was a good politician, he had enormous courage. There was a meeting I wasn't at-I got the story from Kindleberger who did attend-at which Hughes was criticizing [General Jimmy] Doolittle [commander of the Eighth Air Force], for something, and Doolittle said, according to the story, "I am tired of being dragged by the balls over a barbed wire fence by you and your target planners, Colonel Hughes." And he said, "General Doolittle, we're not interested in the state of your testicles, we're interested in winning the war." You know, he felt somehow on another plane and he did talk back to general officers, not in a rude way, but he was just very self confident, a very important guy. He was our marketing agent, our contact with the Air Force and he was quite adept at it.

Anyway, there was this meeting with Spaatz and the other generals. Cabell gave his speech about the plan we had worked out. Spaatz walked up and down, and then sat down at his desk, put on his hat, and said approximately this. He said: "I won't do it. I won't do it. I won't take the responsibility. This f**king invasion's gonna fail. And that's gonna be Eisenhower's responsibility. Then they'll ask us to win the war. And I don't want to have anything to do with it. I'll do what they ask me to do."

I was absolutely shattered. I was horrified. But it was very good preparation for working in Washington.

After the war, "there was a hiatus." Kaysen did not work on military issues very much. "I became a graduate student. I became a junior faculty member at Harvard. I worked on the theory of oligopoly, became a law clerk, I wrote a book about the shoe machinery trial, and so on. But I continued to have an interest. For example, I went to RAND, I wrote some papers for RAND." In the summer of 1951, he worked on Project Charles, an air defense study

⁶ On this whole episode, see especially Walt Rostow Pre-invasion Bombing Strategy: General Eisenhower's Decision of March 25, 1944 (Austin: University of Texas Press, 1981), and the sources cited there, especially on p. 139 n. 1; Robert S. Ehlers, Jr., Targeting the Third Reich: Air Intelligence and the Allied Bombing Campaigns (Lawrence: University Press of Kansas, 2009), chap. 9; and Barry M. Katz, Foreign Intelligence: Research and Analysis in the Office of Strategic Services, 1942-1945 (Cambridge: Harvard University Press, 1989), chap. 4.

⁷ On Hughes, see Rostow, Pre-invasion Bombing Strategy, pp. 16-19, 31-37. Rostow's book is dedicated to Hughes.

organized by some scientists at MIT, who as part of the study asked the MIT economist Paul Samuelson to write about the vulnerability of the economy to air attack. 'I accepted the assignment,"Samuelson said, "and did what any intelligent professor would do. I got a couple of smart young fellows to do it." Kaysen was one of them. 'I hung around and I kind of retuned myself to the technology of the 50's." And then, later in the 1950s, there was an informal discussion group in Cambridge, a kind of "floating crap game," where people talked informally about these problems of strategy and foreign policy. McGeorge Bundy, Arthur Schlesinger, Jerome Wiesner and John Kenneth Galbraith took part in these discussions: Thomas Schelling got involved somewhat later.

I was in and out of that group; I was in on some early discussions of arms control. I knew Wiesner⁸ from our association on Project Charles, so I would gossip with Wiesner from time to time. Part of this time, he was working on the Gaither Report, and so on, so I was more or less attuned to all that. So although my own field as an economist was primarily in microeconomics and in competition and monopoly policy and things related to that, I kept up an intellectual interest in this stream of problems, really all through that period. And I did some occasional formal work.

And then, on February 1, 1961, I was in St. Louis to give a talk in an economics seminar at Washington University. I was staying with Harold Barnett, who was one of my London colleagues. I had just arrived at his house from the airport. I'd really just had time to take off my coat when the phone rang. Mildred Barnett answered it and said in sort of amazed and awed tones, "Carl, it's the White House calling for you." I thought I knew who it was, and of course Bundy was on the line.

"Carl, he said, "I'm having a lot of fun and I'm swamped and I need help. You want to come down and help me?"

"Mac," I said, "have you stopped being a dean so long that you don't know that Monday is the first day of the term and I'm supposed to be teaching two courses? How can I come down and help you?"

"Come down when you can and we'll talk about it."

So I started to come down as a consultant, and in May, or whenever it was that I handed in my last grade, I moved down to Washington. I should add that Bundy and I had been near- contemporaries at Harvard and we knew each other quite well. So I started to come down as a consultant and I think purely

⁸ Jerome Wiesner was appointed assistant professor of electrical engineering at MIT in 1946 and rose to become president of the Institute in the 1970s. He was a member of the President's Science Advisory Committee during the Eisenhower period and served as technical director for the Gaither committee in 1957. During the Kennedy period, he was the president's chief science advisor.

by coincidence, Kennedy had to deal with the civil defense issue and Bundy said, "Hey, you're an expert. Go work on civil defense."

So I got into that and during the summer I worked on trade issues. I went to Okinawa and started the process of liberating Okinawa from the Americans.

This work on the NSC staff was all very free-enterprising. I think Bundy was a terrific manager in the sense that he knew what he needed done and he saw that that got done. He let anybody do anything else they wanted to do and had a way of turning people off without saying "stop doing that"—that is, turning people off when he got a sense that it was going no place, or letting people see that it was going no place. Once during the Berlin Crisis, I said, "Mac, I have some thoughts on Germany, I'm going to write them down." So he said, "if you want to write 'em down, write 'em down." Then when I finished it, we talked about it. "Do you want to put this in the President's reading book?" I said, "sure," and that's the way things worked.⁹

Sometime during the summer Mac said, "Why don't you look into this missile gap business? We know it's not so, but let's think about how it came about and why the Air Force still is not satisfied." In 1961, the Air Force still had a footnote in what we called the Blue Horror, the NIE [National Intelligence Estimate]—they came out in blue covers and were stamped with every kind of classification you ever saw. I said "sure," and by this time I'd learned to use the telephone. I started to call around the bureaucracy and I discovered that the fellow in charge of the CIA estimates was a former Ph.D student of mine, Ed Proctor. So that was easy, and I went over and saw Ed, and we dug into the bowels of what he was doing and what the Air Force was doing. I certainly would not have been able to do that job as well as I did if I had started at the top.

One of the things Bundy learned and the whole staff learned—and Kennedy learned it very well—was who was the working level, and how do you talk to the working level. And how do you talk to the working level without trying to undercut their bosses, because I never said to Ed Proctor, "Tell me about this and don't tell [CIA Director John] McCone I was here." I said, "Ed, tell me about it. Let's find out about it." And there was never an attempt made to run around people. Actually, I made one attempt, out of ignorance really, stupidity and ignorance, to run around [Secretary of Defense Robert] McNamara, and he scolded me in a nice way. He said, "You don't want to do that. If you talk to [Deputy Assistant Secretary of Defense] Alain [Enthoven], tell Alain to talk to me. I always want to hear your arguments." And everything ran smoothly, with a few exceptions. I once had a big run-in with John McCone because I was mixing in his business. He and I went to see the President. When we met in Bundy's office, he addressed me coldly as "Kaysen." But then we went to the

⁹ This was a reference to Carl Kaysen, "Thoughts on Berlin," August 22, 1961, National Security Files, box 82, file "Germany—Berlin—General," John F. Kennedy Library, Boston.

Oval Office and it turned out that the President agreed with me. And when we left, he had his arm around my shoulders and was calling me "Carl" because I had won the argument. It was a very interesting lesson in how bureaucracies work.

In 1961 Kaysen opposed as excessive the Defense Department's plans for a missile buildup.¹⁰ The basic idea here—which, however, he did not articulate in the context of those discussions—was "that try as you will, you never get beyond deterrence. You reach for that plus" but you never get there, because the other side will always be able to take countermeasures.¹¹

One of the most striking things about Kaysen's White House experience is that in spite of his tendency to approach the basic nuclear issue from a "finite deterrence" point of view, in spite of his general dovishness in the 1950s and early 1960s on the whole question of U.S.-Soviet relations, he was in 1961 one of the architects of a policy that would have given the President the option of ordering a first strike—a limited counterforce attack on the Soviet Union—if the Berlin Crisis led to war with the USSR.¹²

I was not in a formal sense ever working on Berlin. On the other hand, I talked to Mac about whatever was on his mind. Sometime in mid-1961, I was at an NSC meeting and Berlin was being discussed. I don't know why I was there because in general I didn't work on Berlin, although I talked to Mac about it. Later, of course, when I was Mac's deputy and there were times when he couldn't be there, and I was more into it. But, at that time I wasn't. [Deputy Assistant Secretary of Defense for International Security Affairs] Harry Rowen was at that meeting. He was part of my "previous network"—he ran the "old boys' club."¹³

"You know," I said to Harry, "we really ought to look into whether we have a first strike, and I think we do. Because, what's going on here? Who the hell knows what might happen? It would be wrong not to think about it."

¹⁰ See, for example, Desmond Ball, *Politics and Force Levels: the Strategic Missile Program of the Kennedy Administration* (Berkeley: University of California Press, 1980), pp. 85-86.

¹¹ But Kaysen did develop this point explicitly in an article he published a few years later. See Carl Kaysen, "Keeping the Strategic Balance," *Foreign Affairs*, vol. 46, no. 4 (July 1968), esp. p. 672.

¹² On this episode, see especially Fred Kaplan, "JFK's First-Strike Plan," *Atlantic Monthly*, October 2001, and also William Burr, ed., "First Strike Options and the Berlin Crisis, September 1961: New Documents from the Kennedy Administration," National Security Archive Electronic Briefing Book No. 56 (http://www.gwu. edu/~nsarchiv/NSAEBB/NSAEBB56/index2.html) (September 2001). A number of writers had been led to minimize the importance of this episode; the claim was that this was a mere "back-of-the-envelope" exercise. See, for example, Michael Beschloss, *The Crisis Years: Kennedy and Khrushchen, 196-1963* (New York: Harpercollins, 1991), p. 256; Kai Bird, *The Color of Truth: McGeorge Bundy and William Bundy, Brothers in Arms* (New York: Simon and Schuster, 1998), p. 207; and James Carroll, *House of War: The Pentagon and the Disastrous Rise of American Power* (New York: Houghton Mifflin, 2006), p. 272. Kaplan is quite correct, however, to point out that the new evidence shows that the plan was a good deal more detailed than we had been led to believe.

¹³ Rowen had gotten a bachelor's degree in industrial management at MIT in 1949, went on to get a Ph.D. in economics at Oxford, and worked at RAND in the 1950s.

So we agreed and sat down and had a meeting. We simply looked at the available forces—we were using the tac aircraft on the carriers and so on—and we concluded we had a highly confident first strike. By this time we knew that there were no goddamn missiles to speak of, we knew that there were only 6 or 7 operational ones and 3 or 4 more in the test sites and so on. As for the Soviet bombers, they were in a very low state of alert. We had some Atlases and some Titans. We could have cratered a hell of a lot of airfields and killed a hell of a lot of bombers, and so on.

What was the thinking behind this effort? Was it an attempt to implement a relatively subtle strategy for controlled thermonuclear war—the counterforce/no-cities strategy that had been developed mainly at RAND in the late 1950s, and which would be outlined by Secretary of Defense Robert McNamara in his Athens and Ann Arbor speeches in 1962?

No, it was just, "Look, we may get in a war. We now know and have known for some months the Soviets really haven't got an operational missile force. Therefore, maybe we really can disarm them. Can we disarm them? It would be great if we could. By God, we can." That was all it was. I remember standing in the corridor outside the Cabinet Room in the White House with Harry. And, as I said, there had been some Berlin discussion and I don't know why I was there since I usually wasn't, but I was. And I said, "Look Harry, who the hell knows what's gonna happen? We ought to ask ourselves the question. We know the Soviets really have no missiles, that we can take care of them. Do we have a disarming strike and what will we need to do it?" And the point is, we didn't need all of SAC. That was the message.¹⁴

We just were saying, "Can we make sure that the Soviets can't launch a really serious heavy attack on the United States?" And the answer was that in 1961 we could have made sure, with rather a high level of confidence.¹⁵ To disarm the Soviets in this way, there was no need to execute the whole SAC mission plan,

¹⁴ The new evidence presented in the National Security Archive Electronic Briefing Book cited in n. 12, and especially the first document posted there—Kaysen's September 5, 1961, memorandum to General Taylor—also sheds some light on this issue. It confirms Kaysen's point that this was not a plan for a controlled nuclear war, but it also shows that Kaysen did accept the "no-cities" argument. "We should seek," he wrote, "the smallest possible list of targets, focussing on the longrange striking capacity of the Soviets, and avoiding, as much as possible, casualties and damage in Soviet civil society. We should maintain in reserve a considerable fraction of our own strategic striking power: this will deter the Soviets from using their surviving forces against our cities; our efforts to minimize Soviet civilian damage will also make such abstention more attreactive to them, as well as minimizing the force of the irrational urge for revenge" (p. 3; see also p. 4). The claim made by one of the interviewers (Trachtenberg) in a review of Kaplan's *Wizards of Armageddon* in 1984 that the plan was "simply a capabilities study, untouched by the subtle 'no-cities' logic that was the touchstone of the rational, RAND approach to counterforce" was thus simply incorrect (*Annals of the American Academy of Political and Social Science*, vol. 475, September 1984, p. 176).

¹⁵ Bundy, however, later told one of the interviewers (Trachtenberg) that both he and the President disagreed with this conclusion. In their view, there were just too many things that could have gone wrong.

with all those weapons assigned to a super-overkill mission, attacks on radars, fighter bases, defense suppression in general. I never calculated this—to my knowledge neither did Harry, nobody ever did it—but my own belief was that if you were on a war basis, you could have cut that down by a factor of 3 and you could have said, "Screw that, that isn't what we have to do." Only certain targets really had to be attacked.

In other words, what we were saying was, "Let's look at the prime targets that constituted SUSAC,¹⁶ the SUSAC system. Let's sort of take out all the garbage and what can we do? That was the question that we were answering, and we were answering it very crudely. After Harry and I made this calculation, I told Mac what the results were, and I'm sure Harry did the same with McNamara—you know, "Carl and I have made a calculation," or "I've made a calculation," or whatever he said, "I think we ought to do this seriously." And I know McNamara did do it seriously, because [Paul] Nitze in some material that came in connection with Cuba or something, Jim Blight's interview, or someplace, Nitze talked about doing a calculation.¹⁷ Now Nitze, of course, was Harry's hierarchical superior. And it is my understanding that the JSTPS [the Joint Strategic Target Planning Staff, the organization responsible for developing the main American plan for general nuclear war] actually dealt with this issue in a full and formal way in response to McNamara's request.

Didn't America's ability to disarm the Soviets and prevent them from retaliating against the United States depend on how far things had progressed, and especially on whether they had alerted their forces? Did it matter, for example, whether they had dispersed their bombers?

No, because remember the Soviet bomber force was really pretty small. Our missiles would be targeted on the major operational airfields, not the dispersion fields and so on. So the alert status didn't matter that much. There was not much need to worry about dispersion, because if they dispersed then they couldn't have an attack.

In working up the plan, Kaysen and Rowen were not interested in the question of what might trigger an American attack of this sort. It was not designed, in particular, to deal with the situation that might arise if the U.S. government received warning that the Soviets were getting ready to launch a nuclear attack—it wasn't preemptive in that sense.

I don't think we ever thought of that question. We never said, "when do we do this?" Remember, there was all the Live Oak planning for the Berlin contingencies—all the stages and big forces and bigger forces—and all we were saying was, "If this goes on, at some point this will become the relevant

¹⁶ Acronym for Soviet Union Strategic Air Command, a term commonly used in the *1950s* and early 1960s to refer to the Soviet strategic force.

¹⁷ Nitze at the time was Assistant Secretary of Defense for International Security Affairs. His role in this affair was first discussed in Fred Kaplan, *The Wizards of Armageddon* (New York: Simon and Schuster, 1983), pp. 300-301.

question." We didn't ask ourselves what that point would be.

This whole effort was rooted in a sense that there was something basically wrong with the way the military was planning for nuclear war. To Kaysen in 1961, what was most striking was the mindlessness of military planning, the way the war plan had taken on a life of its own and become a kind of end in itself.

In September 1961, President Kennedy was formally briefed on SIOP-62, the basic plan for general nuclear war. There was a recent article about it in *IS*.¹⁸ I happened to be there for the briefing. Bundy was out of town, and Walt Rostow, who was then Bundy's deputy, was going and he asked me come. The briefing was very dramatic. [JCS Chairman General Lyman] Lemnitzer was there. As I remember it, there was a Navy captain who was the main briefer and I think there was also an Air Force colonel; I assume they were both from JSTPS. They went on and on.

At one point, Kennedy said to Lemnitzer, "General"—and he always addressed him as "General," a mark that he didn't like him—"General, why are we hitting all those targets in China?" And Lemnitzer said, "They're in the *plan*, Mr. President."

There is no question that Kennedy was just about fed to the teeth in that answer. The whole briefing was a superclassic version of a briefing. It was just more than he could take. The President tapped his teeth, which meant he was mad. After a few minutes he thanked the briefing officers and he leaned over and had a whispered exchange with McNamara. Then he turned to me and to Rostow and said, "Walt, Carl, thank you." So we left. And I think he was going to scold Lemnitzer. He was going to say, "General, I don't want to have another briefing like that." And you know, I don't know how soon, but it was damn soon that Lemnitzer left to become NATO commander.¹⁹

Let me give you another little aperçu from a different context. Sometime in late '62 or early '63, I participated in a Vietnam or Southeast Asia war game. [JCS Chairman] Max Taylor, John McCone, Ros Gilpatric and I participated. It was played in the War Room by a big staff; we came over, I think, every day for a week at lunch time. We were sort of the high command people. I remember one occasion when the guy who was briefing us said, "At this point, we follow SEATO Plan 5." I forget what the scenario was, but SEATO Plan 5 was totally irrelevant to the scenario. Gilpatric, the Deputy Secretary of Defense, turned to the colonel who was reporting the moves.

"But why do you want to do that?" he asked.

"Well, that's the plan we had for a war in Southeast Asia. This is the only plan

¹⁸ See Scott Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," *International Security*, vol. 12, no. 1 (Summer 1987).

¹⁹ Lemnitzer was appointed U.S. commander in Europe in November 1962.

we've got."

And you know, you were struck by two things, by the problems that that these guys had—the logistics of moving people. The nearest people were going to be in the Philippines, in Okinawa, in Japan, and this was a fantastic operation. You couldn't move these people without some kind of plan. On the other hand, this plan was totally irrelevant, because it was a plan for a big invasion. China and North Vietnam invade and we land in Thailand and land on the coast and cut the peninsula in half. I don't vouch for the accuracy of every detail, but I do remember how strongly this colonel gave the answer: "It's in the *plan*, Mr. Secretary."

This was an attitude that the political leadership could hardly just accept, especially at a time when the Berlin Crisis was on everyone's mind and the possibility of general war had to be taken seriously. In particular, it was clear that the whole idea that in the event of war the United States should launch a massive, indiscriminate attack on the USSR—what the RAND people referred to as a "wargasm"—needed to be reviewed, and not by military officers alone. The civilian authorities began to reach down into the military planning process to try to figure out what the situation was and what perhaps might be done about it. This led in particular to an interest in the problem of nuclear command and control, and especially to an interest in the whole question of the predelegation of authority to military commanders to order the use of nuclear weapons.

During the summer of 1961, Harry Rowen and I, and probably also [McNamara's special assistant] Adam Yarmolinsky, had several discussions of the "wargasm." We talked a lot about that and about what you could do about it and so on. Then the three of us went out to SAC headquarters near Omaha. It was very unpleasant, very hostile. It was as though they were practically going to clap us in irons and never let us get out. We spent two days there and their whole attitude-you know, it was sort of, "You bastards, its none of your business." This was just written over all their faces. We were asking about the SIOP [the Single Integrated Operational Plan, the basic plan for general nuclear war] and we were asking about the delegations-and when we mentioned the word "delegation," there was a kind of, "I can't imagine what you're talking about" response. It was a very unpleasant period, but we went away with a strong feeling that action had to be taken. What I told Bundy was I'm sure basically the same as what Rowen and Yarmolinsky told McNamara. And the message to McNamara was: "You've got to get on this even more energetically than you have. It's worse than you think."

I'm fairly sure I first got involved in the whole predelegation question in early 1961, not long after I came to the White House in May. Dan Ellsberg—this is his story—had been running around talking to various commanders, and got from them the impression that they thought they had the power to release nuclear weapons, and that maybe there were letters giving them written authorization to order the use of nuclear weapons in certain circumstances.

He went to see Bundy about this and Bundy said, "I don't know what you're talking about. I've never seen such things." But this started Bundy and Bromley Smith, one of his assistants at the NSC, on a search. And they found someplace in some part of the NSC classified files xeroxed copies of these letters. Then Ellsberg came to see me; he had been my tutee as an undergraduate at Harvard. As he remembers it, I said, "Yes, Bundy in fact found the letters and here they are," and I waved them, although I didn't show them to him. "They're here."

These were letters from Eisenhower, to CINCSAC, CINCPAC and CINCEUR [Commanders-in-Chief of the Strategic Air Command, the Pacific Command, and the European Command], and I won't try to give you the text because I don't remember, but this was the flavor: if you are under attack and you can't establish communication, you have this authority—you have a predelegation. But they did say you had to be under attack, they didn't say in anticipation of an attack, they said you had to be under attack. Now they didn't say how much of an attack, how big, anything of that sort. They didn't say that the attack had to be nuclear. These letters were not very long or detailed. They were all on one page. But if you think about what commands are like, or directives from higher commanders, they tend not to be all that detailed.²⁰

Now, I don't know anything about the circumstances under which these letters were transmitted. Did Eisenhower call the generals into the office and give them the letter and say "Look, what this means. . ." and so on? I have no idea. And I don't know if there is anybody who knows that. None of the CINCs who got those letters is alive.

But the question in early 1961 was: what do you do about it? And Bundy's conclusion, which I certainly remember discussing with him—I should say, the President's conclusion—was that he didn't want to do anything about it. He didn't want to withdraw the letters because that would lead to enormous trouble with the military, and especially with the NATO commander, General Norstad. One of the things that's important to bear in mind is that Kennedy didn't like or trust Norstad. By the end of the Berlin thing, he felt that Norstad had come to think of himself as an independent authority. In mid-1961, Kennedy was already at odds with Norstad, and if there was one thing that Kennedy was faster than anybody else at seeing, it was the politics of the situation. Remember that [German Chancellor Konrad] Adenauer was still there—and I'm putting words and thoughts into Kennedy's head for which I have no evidence at all, this is just me—but I can sort of put myself in the President's shoes and see

²⁰ After this interview was conducted, a good deal of material bearing on this issue was released. Note, especially, Bundy to Kennedy, January 30, 1961, *Foreign Relations of the United States, 1961-1963*, vol. 8, p. 18. The National Security Archive in Washington has put a number of collections of documents relating to this question on its website: "First Documented Evidence that U.S. Presidents Predelegated Nuclear Weapons Release Authority to the Military" (http://www.gwu.edu/~nsarchiv/news/19980319.htm) (March 1998); "Newly Declassified Documents on Advance Presidential Authorization of Nuclear Weapons Use" (http://www.gwu.edu/~nsarchiv/news/predelegation2/predel2.htm) (August 1998); and "First Declassification of Eisenhower's Instructions to Commanders Predelegating Nuclear Weapons Use" (http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB45/printindex.html) (May 2001).

him saying, "All I need is Norstad passing the word to Adenauer that I've withdrawn American nuclear support for Europe."

On the other hand, Kennedy certainly didn't want to reissue the delegation letters, because he was not convinced they were wise. He thought the best he could do was to live with the ambiguity because of course the authority is the authority in the president, not in some previous president. So a lawyer looking at the letters might have said they were invalid. Well, I'm just reporting the reasoning. On the other hand, the commanders might have said they had the authority. When Bundy and I talked about it, I said, "I kind of agree that this is a box in which the President is best off doing nothing." What convinced me that all this happened in 1961, and not 1962 as I had previously thought what convinced me that Ellsberg's account is basically correct—is that Dan remembers being in a particular office in the EOB [Executive Office Building] in early 1961 and my saying to him, "Look, Lieutenant Kennedy doesn't want to overrule General of the Army Eisenhower." Which is exactly what I might have said and very few other people, I think, would have said that at that time. I don't remember saying it, but it sounds just like me.

Some time in 1962, McNamara formally created a command and control task force chaired by Admiral Paul Blackburn.²¹ Taz Shephard, the President's military aide, and I were the White House liaisons to that task force. Ellsberg was involved in it from the Pentagon side. I think Harry may well have been McNamara's delegate—that is, the OSD [Office of the Secretary of Defense] delegate on that task force. But it was run by Blackburn who was on the Joint Staff at this time.

So I got into all kinds of command and control stuff. The military had the idea of the chain of command. They had the idea that the delegation should be available, so to speak, automatically, to the senior active officer, whoever he was, you know the Brigadier in the SAC plane,²² whatever. They had no sense of what political legitimacy means. They had no sense of why the President couldn't predelegate as if he were CINCSAC, and there was no use even talking to them. I tried hard to explain to Blackburn the difference between delegating authority down the military chain of command, and what the presidential authority was like and why the president couldn't in any real sense delegate it, and what made for political legitimacy. It was a zero. None of these guys in suits could understand that. Well, you know, the mentality was just not there. My sense—and this is based on very thin evidence—is that they thought "If war comes, we'll do what we want."

²¹ This was the successor to the Command and Control Task Force, headed by retired Air Force General Earle Partridge, which had been set up in 1961. See, for example, Ball, *Politics and Force Levels*, p. 193, and David Pearson, *The World Wide Military Command and Control System: Evolution and Effectiveness* (Maxwell AFB: Air University Press, 2000), pp. 34-39. The organization headed by Admiral Blackburn, formally called the "Joint Command Control Requirements Group," began operations in May 1962. Thomas Sturm, "The Air Force and the Worldwide Military Command and Control System," USAF Historical Division (1966), p. 17 (http://www.gwu.edu/~nsarchiv/nukevault/ebb249/doc08.pdf).

²² A reference to SAC's "Looking Glass" airborne command post.

There was a plan to construct a "deep underground command post" under the Potomac, a sort of bunker that could survive a nuclear attack, which for some reason went by the acronym DUKW. But the JCS, Kaysen said, always opposed the idea. Kaysen at one point asked Harold Brown, then head of Defense Research and Engineering at the Pentagon, why the Chiefs were against it. "Well," he said, "basically the Chiefs probably aren't interested in having the civilian command survive. If we were to come to a war, they would only get in the way." Another straw in the wind had to do with the "attitude of the admirals."

The Kennedy School recently held a conference on the PALs, their history and so on, and there were several retired admirals there, including guys who were sort of doves, and they explained why you basically couldn't have PALs on any naval weapons.²³ It was clear that even their attitude was: "We're going to use them whenever we think have to use them." This just stood out all over, and I think that's what everybody thinks in that business.

Kennedy, Kaysen said, had his own way of dealing with this sort of problem. He was "not a great person for abstractions. That is, he wouldn't have said, 'Ideally, what does one do?' He would have said, 'Who's asking this question, when and why?' That would have been the context in which he would have thought about an answer." Kennedy didn't like to just take what he heard at face value.

I remember once being in a meeting with him where the draft of a civil defense pamphlet was being discussed. In the draft, there was something about burns and about putting grease on burns. He read it and he said, "That's wrong. You put cold water on burns, grease was an old-fashioned idea. You put cold water on burns."

"Well, Mr. President," I said, "I know that the Pentagon military people checked this and they probably should know that."

"Call the Surgeon General," he said, and he picked up the phone and got the Surgeon General. And then he said, "I told you I was right."

I could spend two hours, I think, telling you stories like that, which to my mind have the following sort of point. This man had a retentive mind. He was intellectually curious and he did not take anything that he was told as "that's it."

And he was very cautious about getting involved in conflicts. I have lots of stories about Berlin, about South Yemen, about whatever, that point to how cautious John Kennedy was. Let's put it this way: if you're hostile and if you're a gung-ho hawk, there's lots of evidence that Kennedy was a timid man. I don't

²³ See Peter Stein and Peter Feaver, *Assuring Control of Nuclear Weapons: The Evolution of Permissive Action Links*, CSIA occasional paper no. 2 (Cambridge MA: Harvard Center for Science and International Affairs, 1987).

think that's an appropriate description, but Kennedy never took the attitude that "we're superior and so on, we can push these bastards around, let's do it."

And he was very conscious of the political strength of the Chiefs in Congress. But even aside from that purely political dimension, he had real respect for what these guys were. When he told Wiesner that he was making [General Curtis] LeMay Air Force Chief of Staff, he said, "I know you're not going to like this, but you know the Air Force wants him, and the Air Force ought to get what they want, after what a terrific job he's done." And several times he said, "We may not like these guys, but we depend on them."

There's one other story about Kennedy. This is one of the absolutely great scenes of my life. Do you remember the great Chinese war on India? It happened during the Cuban missile crisis. Everyone was so preoccupied with Cuba that I became a kind of vice president for the rest of the world. I was the one who received the thirteen-page message from Nehru, the Indian prime minister, asking for the loan of B-52s [complete with nuclear weapons] so he could bomb China. The Indian ambassador in Washington called me up and said he had to the see the President. This was during the black period—that is, the first week of the missile crisis—when nobody knew anything was happening in Cuba.

"I'm sorry, Mr. Ambassador," I said, "but you can't see the President. He's not available."

"Well, I have an enormously important message to deliver from the Prime Minister."

"Well, you'll have to deliver it to me and I'll see the President gets it."

So the ambassador came in with the text, and I read it and said, "My God!" This was about 6 or 7 o'clock. I went through the routine of what you do after hours. You call up a person called the head usher, who's a kind of butler, and you say, "I have something I have to show the President. When may I see him?" He called back and said, "Come at 9 o'clock." So I went up to what's called the family quarters. There's a small sitting room there, and the President and Jackie were sitting there. She was drinking wine, and he was drinking milk. I guess it was after dinner. I hadn't had anything to eat—I mean I was sort of going crazy. I was offered a glass of wine, which I turned down for the sake of clarity, and milk which I turned down because I don't drink it. And then I said, "Here's a letter from Nehru."

He sat there reading this letter, handing each page to Jackie, who read it and said, "My, I always thought he was a peaceable sort." And John was saying, "My God." Then he called up David Ormsby-Gore. You know that Ormsby-Gore was a kind of second cousin by marriage, and that he and the President had a very intimate relationship. Ormsby-Gore had a very interesting, and, I thought, brilliantly done balancing act of being the President's pal and being Her Majesty's ambassador. So Kennedy called him up and started to read this letter to him right over the phone. I couldn't hear Ormsby-Gore, but Kennedy was saying, "Well, this is mad. This is mad." Then he thanked me and said good night.

One of the things I had done was to call [Assistant Secretary of State] Phil Talbott and tell him to tell Secretary [of State Dean] Rusk that this letter had come in and I was bringing it to the President. I had arranged, before I saw the President, to have a copy of Nehru's letter made and sent over to the State Department. So after I got back from the White House, Rusk called up and said he had to see the President.

"Well, Mr. Secretary," I said, "you know he's seen the letter. Don't you think it could wait?"

"No," he said. "I really must talk to him."

"Okay," I said. "I'll arrange it and I'll call you back."

And again, the way the rules were—Bundy wasn't in on this, I don't know whether he was zonked out or what—the rules were what they were, so I called the usher again, and I said, "Would you please wake the President?"

Kennedy agreed to see Rusk at 11:30, or whenever it was. So we went up into the Oval Room, which is a living room on the second floor of the White House. Kennedy was in a dressing gown, rubbing his eyes, looking like he's sort of cross, but trying not to show it.

"I think we ought to take this message seriously," Rusk said. "Well," the President replied, "let's think about it overnight." Kennedy, I'm sure, didn't want to ask him what he meant by "seriously."

I was just sitting there, thinking, "Jesus Christ, what's going on?" And, well, it sort of went away. It just went away. Kennedy gave some kind of emollient answer and it went away. Nehru was clearly hysterical.

The Sunday morning that we got the final message from the Soviets on Cuba, I had spent the day and a half previously working with Phil Talbott on a letter to Nehru and a letter to Ayub Khan, the Pakistani president, telling Nehru that we did want to help, and telling Ayub that we thought the Chinese were a threat to him, that we wanted to help India, but that he shouldn't take this the wrong way—you know, all this crap. And I polished it up and Kennedy said—he didn't use the word, but he said to put more schmaltz in it. And then that afternoon he approved the final drafts, and said, "Is Phil happy with this?"

"Yes," and so on.

"Has the Secretary seen it?"

"Yes," and so on.

"Okay, send it, although why do you think these fellas ought to listen to me?"

"Well," I said, "you're twelve feet tall, Mr. President. Any guy in the world would listen to you."

"Well," he said, "that'll pass quickly enough."

Getting back to the predelegation problem: while there was no head-on clash with the military over this issue, the Kennedy administration's concerns in this area did lead to certain practical results. Perhaps the most important had to do with the tactical nuclear weapons in Europe. In 1961, the delegations extended far below the levels of the Commanders in Chief: 'The CINCs passed them on.' A colonel whose unit was under attack, and whose communications had been cut off, had the authority to use the nuclear weapons in his command. Was anything done at that level?

I have no idea, but that's one of the reasons why we didn't put the Davy Crockett in Europe. And we stopped making them. I played a role in that. I remember saying to Dave Bell, the budget director, at some budget session, "Let's get this goddamn Davy Crockett out. Let's not spend any more money on it, it's a piece of crap. I mean, how can we use it?" As Jack Ruina likes to say—he didn't say it to me at the time—it's the only weapon whose lethal radius is greater than its range. Anyway, a little later I was at a meeting with Max Taylor and we were talking about the budget issues and so on, and he said "Somebody's against the Davy Crockett. Who knocked out the Davy Crockett?"

I said, "As a matter of fact it's me."

"Why are you against it?"

"I can't imagine a situation," I said, "in which it could be safely deployed and used. How are you going to command it? How are you going to be in control of it? You'll have some sergeant in a jeep firing off nuclear weapons because he's in danger of being captured. And his company commander won't know what's happening, much less a higher level of authority."

And Max said to me with all his medals flashing—I mean, he was in a grey suit, but the medals were certainly metaphorically there.—"Well, I've been command of infantry divisions" (and the message was, "you haven't," which was certainly true) "and I never lost touch with my unit." So I just left it. Now you probably don't know that Max was in command of a division which lost a third of its men in 3 or 4 hours because of bad intelligence. He landed on a German

divisional headquarters on the night of D-day and was massacred. And I thought to myself, here's one of the most intelligent and sophisticated generals we've ever produced and that's what you get out of them in a certain situation.

And of course the PALs were put on the nuclear weapons in Europe. Did this have anything to do with people's uneasiness about some of the allies having effective control of nuclear weapons under the sharing arrangements worked out in the late 1950s?

I hadn't thought about it in those terms, but I think there might have been less resistance to the PALs, and to the tightening of control in Europe, for that reason. I think even the Air Force was a little unhappy with the sharing arrangements. I don't know if they was as unhappy as I was at the thought of Turks and Greeks with their fingers on the nuclear trigger. That used to drive me up the wall when I thought about it.

Looking back over these nearly fifty years, what sort of general insight stands out most clearly in Kaysen's mind? It was the idea that military practice, at least at the level of general war, had lost touch with basic political and social realities. War, among the industrial nations, no longer made sense, the way it might have in the pre-industrial world, where land had been the basis of wealth and there was no pretense that the purpose of government was to make the people at large in some way better off. "As far as modern nations go, war is certainly obsolescent and will probably soon be obsolete."²⁴