

**Frederick R. Kappel Oral History Interview – JFK#1, 11/08/1965**  
Administrative Information

**Creator:** Frederick R. Kappel  
**Interviewer:** Nelson Aldrich  
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**Biographical Note**

Kappel (1902 - 1994) was Chairman of the board, American Telephone and Telegraph Co. (1961-1967); chairman, Business Council (1963-1964). The interview focuses on the changes that the John F. Kennedy [JFK] administration made to the Business Council and the introduction of Communications Satellites, among other issues.

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Frederick R. Kappel– JFK #1

Table of Contents

<u>Page</u>	<u>Topic</u>
1	Development of the Nike missile for the Department of Defense
3	The Department of Defense's funding of Bell System
4	Bell System's transition to becoming a non-profit project
6	Effects of potential disarmament on defense contractors
7	Research and development [R and D] contracts with private companies
8	Government funding for the moon landing program
9	Meeting with John F. Kennedy [JFK] about Radio Free Europe
11	History of the Business Council
12	Changes JFK's administration made to the Business Council
14	Business Council's perceived tensions with JFK's administration
15	New structure of the Business Council
16	Attitudes of members of the Business Council towards JFK's administration
17	Steel crisis of April 1962
20	Business Council's proposed tax bill
22	Background of Communications Satellite
24	Administration bill about satellites
25	Bell System's attempts to get administration bill passed
26	Conflict between carriers and manufacturers over Communication Satellites
27	Potential ramifications of satellites
28	Components of a cable

Oral History Interview

with

FREDERICK R. KAPPEL

November 8, 1965  
New York, New York

By Nelson Aldrich

For the John F. Kennedy Library

**ALDRICH:** Well, Mr. Kappel, we were talking about the general area of research and development and the problem of the federal government's involvement in private research organizations. Have you any ideas on that topic?

**KAPPEL:** Well, ideas. I think the research and development involvements of the Defense Department, of course, are massive, and they are varied in their coverage of science and implementation of it in military weapons. Our part as a contractor with the Defense Department dates back to prior to the War and has been a consistent one ever since in an area that relates to the newer things that come from or adopt themselves out of communications. We have pretty much limited ourselves to that. It has been a major involvement, and we've had people involved in the evaluation areas of missiles and weapon effectiveness; we did have people involved in the evaluation of the so-called missile gap, all of which culminated in a presentation before the Joint Chiefs of Staff and I believe the Security Council. And basically, we carried the missile work as the chief managing contractor from the end of the War, when we were asked to develop a missile which turned out to be the Nike missile. It was a guided missile to defend against incoming aircraft.

To the extent that we did that, we did become the first American contractor to produce a missile, and we did that in conjunction with the Douglas Aircraft Company, who built the aeronautical part of it. We built the guidance and the tracking radar equipment. As a result of our having the basic design, we have stayed in that area. This is a contract with the Army. That's been a high per cent of our involvement, except when we were literally drafted into development of and building the DEW [Distant Early Warning] Line radar across the North and managed the building of the SAGE [Semi-Automatic Ground Environment] system in this country, but these are all projects that have been completed. The Nike missile has gone on through to Ajax, the Hercules, now the Nike Zeus and the Sprint missiles, and they are now being tried out with a wholly new concept of radar at White Sands Missile Base and on Eniwetok Atoll in the Pacific where we have a large number of people involved.

As to the Kennedy Administration coming into office during a sequence of this kind, I think I would say this: This is an activity that really began in the [Franklin D.] Roosevelt Administration as a wartime undertaking; it carried on through the [Harry S] Truman Administration, through the [Dwight D.] Eisenhower Administration, then the Kennedy Administration, of course. It is still going on. I would just make one observation which is pertinent to the times: I believe that the defense effort has been a completely objective undertaking by our government, irrespective of the political party in the White House or the majority in the Congress. There have been, obviously, squabbles, and there have been differences of opinion, and it would be a pretty sorry program if there weren't differences of opinion. But as the head of the Bell System and knowledgeable and living with this research effort that I have described, and in addition to one for the Atomic Energy Commission where we have some fourteen thousand people involved in the atomic weapon area, I can in all honesty state that you could hardly say there was a difference in one administration and another. The military establishment is a going concern, and the things that we worked on are strictly military, and they are not subject to much change otherwise.

ALDRICH: What per cent of your R and D [research and development] budget is provided by the federal government, the Defense Department, specifically?



KAPPEL: About half. We have not let this interfere with our Bell System work which runs around a hundred and eighty-nine to ninety million dollars in R and D, and that's about what the government figure is insofar as it involves our laboratories. And in that respect it's equal in money to our own but only involves about 30 per. . . . Let me put it this way: It is half of our total research and development expenditure and involves only about 30 per cent of the people, the reason for the difference being that we go just as far as we possibly can in subcontracting it out to universities, to smaller units who specialize, and so forth, but we keep the management of it so that it all feeds in together. Now our total defense expenditures, the government expenditures, run roughly three times that. Right now they are about five hundred million dollars. The difference, of course, is in the manufacture of these guidance systems, the maintenance of a sizable crew of people down at the Cape who operate the guidance of the missiles as they go up, and it includes also the atomic energy aspect of it, which really is defense but not within the Defense Department.

ALDRICH: Do these people--I'm talking now about the psychology of it--do these people who are working under government contract feel, do you suppose, that their primary loyalty is to the Bell System, or do they feel that they're working for the government?

KAPPEL: No, their primary loyalty. . . . Of course, I don't think, anyone puts his loyalties to his country, second to anything, and obviously they're very dedicated people. You can't go to White Sands or this large complex over at Whippany, New Jersey, for example, where our largest group is, without realizing that they are completely dedicated to what they are doing. And I would say that a great many of them would take a little while to get back to being too useful to the telephone business. This worries some of them, but we manage to turn them over, so that's not the case. We do have a sizable number of people who you could honestly say have never worked on anything but this sort of thing, and obviously that is where their loyalty lies.



Now at Sandia Corporation, we only have about fifty Bell System people out of fourteen thousand. There that whole organization has been recruited, and it is set up with their own pension plans. Everything is separate from the Bell System so that it could be a going piece of business, and we might move fifty people out of there. They are in the top echelon for one very simple reason: The contract we have says we will run that with the same standards of direction and policy that we run our own Western Electric Company.

That's how come we got involved in it. And I think that's an interesting little piece of history. It was during Truman's Administration when the atomic program was pretty badly off, behind schedule, and some of the stored pieces on test had deteriorated, and they needed new management. They came to us on one Sunday I can remember in 1949, an Atomic Energy man, David Lilienthal was the chairman of it, and they said that they needed what the Bell System had in manufacturing, in the laboratory, and an operating complex that worked together, that would each influence the other. And that's what this atomic bomb business needed. We investigated what was needed and what had to be done, and we found that there were so many overhanging controls--governmental inspectors, governmental auditors, governmental scientific people and all the rest--that we decided that we couldn't do any better than the ones that had it at that time unless they really let us do the job. So we had an inventory made of the reasons for all that looking over your shoulder and it came down to what amounts to an overlay to police the level and accounting for profits with a regular bureaucratic application in other areas as well. I guess that they just had to surround you with people.

So we made a proposition--we thought it was in the country's interest--that if they would forego all of that, we would forego the profits, and maybe that could get all this looking over our shoulder off our back. We would do this provided they would write in the contracts that what they really wanted was for us to run this organization, this operation, on the same basic principles that we run our own, because that's what they were trying to buy. So we have operated on that basis ever since, and today there are, as I say, only about fifty people from the Bell System in there. The board of directors are Bell System people, and there's a strategy group of military and civilian and Atomic Energy people who meet quarterly with our board in



order to coordinate things.

ALDRICH: And that contract has been the model for . . .

KAPPEL: It's been replaced at five year intervals ever since. It's still on a no-profit basis.

ALDRICH: Well, has that been also the model for your other contracts with the government?

KAPPEL: No, it has not. This is the only non-profit contract, I think, the government has anywhere, as a matter of fact, and that was because this Atomic Energy thing was vital enough, in our judgment, to warrant it. No, I think if we would go very far with that, we would be very much out of sorts with our stockholders if we devoted too many people. That's why we built up a separate organization. That's basically an Atomic Energy property, and the people in it would stay there. They haven't moved on in the System. But that's the only place we've done that. We have another organization working for NASA [National Aeronautics and Space Administration] called Bellcom. It's strictly a scientific evaluation group. That's a separate corporation, and we are doing much the same there, but not at no profit.

ALDRICH: Can you tell me some of the other kinds of contracts, in a general way, that apply in this whole area?

KAPPEL: Our contracts, you mean? Well, currently, I think that's about all the real contracts we have. I mentioned the Arctic DEW Line and some others that are pretty well closed up. We have another military contract that I'm not at liberty to even name.

ALDRICH: Well, that's in the future. Is there anything else then that you would like to say about this area before I go on to ask you a more general question?

KAPPEL: No, I don't believe so. I think I would just say that the Defense establishment has been under excellent management, in my judgment, with Secretary [Robert S.] McNamara, and, of course, it still is.

ALDRICH: His introduction of the "cost plus" theory of contracting, did that make a great change in your . . .

KAPPEL: Well, I think he got rid of the cost plus.

ALDRICH: That's correct. I am sorry.

KAPPEL: That's one of the bad features. No, it hasn't made any difference to us. We've operated, as I've said right along, like we do our own, and we have a determined program to reduce costs in this area as well as our own, and the same people work at them. No, nothing that has changed in the Defense Department has had any particular bearing on our setup. We are not, basically, in this defense business except as our peculiar capabilities will apply. We've never gone after any defense business. We have enough work to do for ourselves. Anything that falls in the realm of our own expertise here in the telephone business, we've always felt that that should be applied on defense where it can be applied better by us than somewhere else.

ALDRICH: You don't feel, in other words, that when Eisenhower talked about the military-industrial complex, you don't feel that your company would be hurt by any progressive disarmament?

KAPPEL: No, not in the least. I know what he's talking about, and I am fully in accord with what he's talking about. What he is dealing with is this matter of competition for this work. And there are companies in the United States whose per cent--well, their per cent of total effort is up in the 80-90 per cent on defense work. Of course, it's a pretty stark future when you look at that point of view, and I think what he was talking about is the relationship between the industry and the defense people. But we are not in that category. As I say, we've never sought this work.



As I described, in this atomic thing, they came to us. In fact, we had a real head-holding session around here to decide whether we should take it.

I could tell you of some big ones that we've avoided rather than take them on for the simple reason that, in the last analysis, the communications job in this country is a big one. We're not trying to make it any larger, but we've got to see to it that it's an effective one because all of this defense activity and the defense of the country still uses communications facilities. We still provide defense facilities all over the world and in this country. We've got a major responsibility and ability. That's our own; that is not a government project. That's a responsibility we have, a public one. So we've been very careful not to allow this defense business to get a major handhold.

Now, if we were to go out of the defense business tomorrow or in a given length of time, no, we would have no concern about that. Most of these people, we'd just welcome them back to work on something. We have a long list of priorities that we would get to in a hurry.

ALDRICH: I was reading an article in Fortune magazine about R and D contracts from the government to private enterprise. The author of the article raised the question that we've approached the point where somebody has to think very carefully about how, in allocating these grants and contracts, a certain amount of pork barreling can be avoided. I wonder if you've had any experience. . . .

KAPPEL: Well, if you get me too deep into this, you're going to have to pull this off the air for a while because I think there's a good deal of that. I really believe that if. . . . I know some universities that I have something to do with that, in one instance, roughly 50 per cent of their total budget is government money. And as you look around the country and see where this is going--it's coming mostly now out of NASA, not the Defense Department--it begins to make you wonder of two things: number one, if you can possibly eliminate political thinking from the placement of some of these (it certainly is not going on the basis of competency alone, or it wouldn't go so far); and the second thing, that is



more pertinent to your question about industry, is if we got into a disarmament arrangement, I think this could be building up to a point where it could be pretty painful in this respect.

Being in the field that it's in, however (university and education) I'm sure it would be the sort of thing that would generate a lot of heat in the way of keeping it going for the sake of the institution. And I believe that an effort like the space program is bound to come to the point where this crash program of the moon by 1967 or 8 or 9, or whenever it is--'69, I guess, now--when that climax has been reached, what worries me is that there'll be a great deal of pressure of a pork barrel nature to keep that level up rather than let down all these things. And if that happens, in my judgment, it will be a boondoggle. We're not there now. We haven't reached that point, but it's coming. Each time, as I see some of these research centers built at the universities. . . . And my university (Minnesota) just received a big grant; Columbia is a place where roughly half of their budget is government grants. I haven't attempted to filter it out. A good deal of it is for medical research, social study etc, and that shouldn't stop; a lot of it is for other things. But to the point you raised, the size of it dictates that there be a very careful management of such grants. Now I'm not in a position to say that we are there, but I am saying that it's of a proportion to be something to concern us.

ALDRICH: Do you have any ideas how it could be remedied before it gets too bad?

KAPPEL: Yes. I think it would be prudent to make the government areas of activity in this field operate on sparser rations of funds so that they'd have to bear down and have everything they spend have an important value bearing on the current object of their need. I think that the present NASA organization is concerned about this. I think they have a decision to make: Do they try and keep going or do they taper off? But right now I think, if I'm right on my numbers, there are some four hundred thousand people engaged in this activity on some one's payroll. And I can tell you, you don't turn that off fast. It's commanding a very major portion of the country's scientific personnel, and it's generating a pressure to produce more scientific personnel through the



processes of education. The very facts of life dictate that you ought to be very jealous of using what we have in order not to build up to the place you have to worry too much in the future. The more you go up this way, the tougher it's going to be. What I'm saying is that I consider this a very important matter and it's not too late right now to begin worrying about it. And I think they are. But again I would say we are not, as a business, involved in that problem because, as I've said before, we maintain about a third of the manpower on our own payroll and contract the rest of it.

ALDRICH: Perhaps you would like now to talk about your more personal relations with the Kennedy Administration?

KAPPEL: Yes. Actually, they were not very extensive. I didn't know. . . . I'd never met John Kennedy until he was elected. I think the first thing I heard from him was right after the election, there was a very gracious thank you letter for the assignment of communications personnel to his campaign group, Jimmy Williams and others I am not familiar with. He (Jimmy Williams), an Assistant Vice President of the Northeast Bell Telephone Company, traveled with the candidate's party and saw to it that communications were ready when they got there and all that sort of thing.

The next contact I had with him was a very routine affair which had been going on all through the Eisenhower Administration and maybe before that. It had to do with Radio Free Europe, which each year the CIA head and the President--as I say, I only know of it back into the Eisenhower Administration. Each year in the spring, and this time it was in February, the 8th of February, we would meet in the White House and the CIA head, this time Allen Dulles, and President Kennedy and there were others in the room from the government and an invited group of businessmen. In this instance there were about fourteen of us. There had been occasions when there were more. We simply got a firsthand evaluation from the CIA head and the President as to confirmation of the value and purpose of the principle that the Voice of America was a citizens' undertaking that a feature of its effectiveness was that it wasn't government paid for and government sponsored. It was a people-to-people thing, and it has largely been supported financially by business organizations.



This lasted an hour or so, and it was a very cordial and very interesting session for several reasons. I believe it was the first meeting that took place between any particular group of businessmen and the new President. There were many that followed, but I think that's the significance to this one. I remember that I flew back from the Virgin Islands to go to it, then went back at the end of the day. I thought a good many times about that. I don't know why I'd fly back for it except it was a meeting with a new President. But for that it was sort of a minor undertaking because we all knew what it was about before we went, and we've all been supporters of it for so long that one could tell another about as much about it as we were getting in this meeting. I think the President had some concerns as to whether it was worthwhile, too. But I haven't been to one--yes, I've been to one since. That was the first occasion. I think the next meeting with President Kennedy was one that had to do with the Business Council.

ALDRICH: I was going to ask you that . . .

KAPPEL: This is a chapter of history that I think is most interesting because it was produced out of just sheer rambunctiousness--I'll put it that way--on behalf of a few people in the government. And I think they drove the Business Council to the point where we changed our whole setup and came out of it with something that's more valuable to our country now than it was before. In other words, we didn't fix something; we remanufactured it. I think that story, whether you get it from me or someone else. . . . There's only one other fellow, probably. I don't know whether you're going to interview Roger Blough or not.

ALDRICH: Yes, I am.

KAPPEL: Well, he was chairman of the Business Council at the time, and I was about to be.

ALDRICH: As I understand it, sir, the Business Council evolved out of the Business Advisory Council.

KAPPEL: Would you like me to and you can throw it away if you . . .



ALDRICH: Oh, I want to hear you.

KAPPEL: This organization known as the Business Advisory Council to the Secretary of Commerce is its name. It was founded in the early days of the first [Franklin D.] Roosevelt Administration by the then Secretary of Commerce--I've forgotten his name--Roosevelt's first Secretary of Commerce. As I understand it, he believed that there was no business thinking in the Administration, and he thought that the Commerce Department had the responsibility of representing and getting business thinking. And there was a little more to it than that because there was an anti-business attitude at the time affecting the economy. So he invited, I think it was something like sixty businessmen from different sections of the country. First, he invited a few down there, and they organized this group which was a consulting kind of a setup. They selected businessmen who were, first, the head of their business; second, if possible, those who had had a distinct interest or a part in the government; third, they were to be of a caliber who were involved in public and civic things and able to operate on something other than a selfish interest basis--basically, they phrased it this way, who would put their country first in everything they considered. It's not hard to find that kind of people either. Third, they were selected geographically so they represented the country at large, and then, lastly, a mix of industrial categories, electrical manufacturing, steel, communications, oil, and so forth, and with a certain amount of judgment as to size of business, large and small. That's the basis. And there were some bylaws formulated at that time which stated the purpose of the organization was to meet with the government through the Secretary of Commerce for three purposes: Number one, to offer their services in way of assisting the government in its problems as it related to the business or anything business could be helpful on; Secondly, it would provide a forum for businessmen to hear from government of government's problems and vice versa. In other words, they would meet and have government officials and businessmen exchange views and so reach a more effective understanding of their problems. And this continued over the years on the basis that these meetings were off the record. In other words, there was no news media present in the meeting.



And we had had quarters in the Department of Commerce. Otherwise, this was a self-supporting organization. The members paid all the expenses. It was of no cost to the government. We would meet there, and the Secretary of Commerce, as a member of the Cabinet, would bring us up to date in an informative way as to the problems that were then facing him. And he frequently would suggest that we consult or constitute an ad hoc committee of five or six people who were knowledgeable in this particular subject, a maritime or transportation problem for example. I served on two such committees. We had one to help the Secretary of the Navy make a substantial savings in ship design, for example. That kind of thing we could do.

This went on through all the Secretaries of Commerce up until Mr. [Luther H.] Hodges came in with the Kennedy Administration. Before we had a meeting of the Business Council or any word from him, it became evident that the ground rules were going to be different. We didn't quite know why, but one of them was that hereafter the press would be present in these meetings and membership would be selected differently. These two things just meant one simple fact: That the businessmen were no longer interested in it because it was no longer their organization. You do not get a good group of businessmen up on their hind legs and frankly discuss the pros and cons of any important plant problem in front of the press for obvious reasons. You can't divest yourself of the many other responsibilities to the extent you can be free and easy in front of an audience.. So we had meetings with Mr. Hodges and Eddie Gudeman, who was his Under Secretary, and talked about these principles, and I think that we came to an understanding that this was unfortunate, but the fat was in the fire. It would have been very handy for them to have met with the Business Council and to talk this over before they pulled the string. As a consequence, we got it back on the track. It lasted about so long, and then all hell broke loose, and we were back where we started. So the Business Council met a number of times here in New York.

ALDRICH: The Business Advisory Council?

KAPPEL: The Business Advisory Council met here in New York a number of times. Averell Harriman had been Secretary of Commerce at one time, and he had also



been Chairman of the Business Advisory Council as a civilian. Charlie Sawyer, another Democratic Secretary of Commerce who had been a member and still is, and John W. Snyder, Secretary of the Treasury in Truman's Administration, as well as Sinclair Weeks, all were upset about this development and carried on discussions with our new Secretary of Commerce and his people, but they didn't get anywhere. So we decided . . .

ALDRICH: What did they plead?

KAPPEL: To get this back on the track and not spoil this organization. It was too valuable. It was a basic. They knew all the things that had been done constructively in it.

ALDRICH: What was Hodges' point?

KAPPEL: That this was an open forum, that no government people were going to participate in the meeting unless the press was there. They made some kind of commitment, and he was stuck with it. Anyway, we were meeting to decide what to do about it, and we decided not to engage in any more nit picking with Hodges but to reorganize on the basis of a new name and divest ourselves from the Commerce Department, move our quarters out of the Commerce Building into a downtown office building, and we'd select our members the same way we always had. We had been recommending them to the Secretary of Commerce, talking them over, and he would invite them. This was no longer to be the case with the new set-up.

ALDRICH: You mean the new group was not . . .

KAPPEL: No. Before this action we had reached a point where we would give him half again as many names as were going to be members, and he would select out of that. But that didn't work because. . . Well, I won't go into that. This is for the record.

ALDRICH: But I think it ought to be remembered you are not talking to a newspaperman, Mr. Kappel. This is . . .



KAPPEL: No. I think the thing was that we received member suggestions by the Secretary, with the idea he was going to name his choice. We had five new members to be recruited. We gave him eight names. Five that had been on our list and had been screened for a long time in the usual way and were next in order and three that were his own suggestions. He didn't talk to us about what he was going to do with them, but then we just promptly invited the three of his and did nothing about the rest of them. They turned up for the next meeting already members before we even had a membership committee meeting on it. They are members, and they're all good people, but it was kind of high-handed treatment that made it clear something had to be done. We met in New York and decided that we would be the Business Council; we would move out and offer our services to the government to whatever extent they were willing to take them. About the time that we formulated this, the President called, and several of us made a date to see him. Six of us went to see the President.

ALDRICH: In 1962.

KAPPEL: Yes, I suspect that's about right. No, it was '61. And we agreed very promptly--there was no one else with him--that this was very picayune, this sort of thing, for responsible people to be kicking around. I mean, it was easy to solve it if somebody just wanted to. But we could not be a party to going along with these changes because we could not do anyone any good. We couldn't attract membership to come to a forum where you were sitting in front of the press. There would be no conversation; there'd be no exchange of thought in that case. He promptly said, "Well, I agree with that." He said, "I don't know. What do we do about it?" He said, "This is not good for my Administration and it isn't good for the country to have this advertised confrontation with business." And we said, "Well, we have no quarrels with you or the Administration except we are disturbed that it is being very greatly exaggerated by the press because they can't get into meetings and we hear all kinds of things about what they think happened. It's getting worse by the minute. We have press conferences after each of these meetings, and that doesn't satisfy them."



But we said we didn't think we ought to talk about these picayune subjects involved, nor deal further with Hodges on it. We had a plan, and we had decided to change the organization and we handed him (the President) our own piece of paper. He was interested, and he took it, and he looked through it very quietly, and said, "This is wonderful," or words to that effect. And we said, "We think we can even do more." What we proposed was, instead of being associated with any facet of the government, that we have an organization with the same bylaws that we'd always had, the same purposes, but not affiliated with the Commerce Department. But under the plan we would constitute a liaison group of four or five of our membership, acceptable to the Cabinet officers, who would service as a liaison group with each Cabinet officer or division of the government who wished to participate. And if they didn't wish, we would have no such committee, but we knew that the Secretary of the Treasury and the Secretary of Defense and some others were very upset about this thing because there were very important babies to them in it. Well, he (the President) made just one comment, and he said he thought, "That's great, but there's just one thing you've left out of here. I don't see where you proposed a liaison committee with the White House or with me." And our comment was, "Well, we thought that would be presumptuous, but it's as simple as putting it in there"--and also the Committee for Economic Advisors. So that was the occasion. He then called in. . . . What's the fellow's name in the White House that's now down in South America?

ALDRICH: Dungan?

KAPPEL: Dungan. Ralph Dungan. And we talked and agreed that when we broke up, we ought to be together on what they were going to say and we were going to say to the press. We sat in the Cabinet Room and agreed upon that, and there was a certain amount of thrashing back and forth because at that point he brought Eddie Gudeman in, who objected but had no choice. And then we went out and met the press on our side, and they released a statement on the other. I would say that this organization has been busier and more involved and has done more things since that than it did in a long time before. It's been a very effective, going piece of business.



ALDRICH: Who were the six people who attended that meeting with the President?

KAPPEL: They were Roger Blough, myself, Harold Boeschenstein, [Stephen D.] Steve Bechteh, L.F. McCollum, Sidney Weinberg.

ALDRICH: Now was this before or after the episode--not to say crisis--of the steel price?

KAPPEL: Long before. I became chairman January first of '63, and Blough was no longer chairman when that happened. It must have been in 1963. Anyway this was earlier. I'd say it was in July of 1961 that we met with the President and changed our organization.

ALDRICH: Now, I'm going to ask you what may seem to be a personal question, but I don't mean it that way. I'm going to ask you about the attitudes of the people in the Business Advisory Council vis-a-vis the incoming Democratic Administration.

KAPPEL: Well, I'll tell you frankly that I think most of them were like me. Most of the people that came in and were involved in it were new faces. I'll leave out a few of them. I'll call McNamara, we all knew him. [C. Douglas] Doug Dillon in the Treasury, we all knew him. But then there were lots of people in the Administration that were new. I think we had general wonderment as to a "what now" kind of thing, because it was an unknown quantity. I think that bears on that next point down here, how to operate: men and means; organization for decision-making. I put a ring around that to get at this thing we're talking about. I think we had a certain amount of businessman's apathy for the reason that there was an awful lot of spirit and an enthusiastic attitude in the whole place to remake everything. Everything that had been going on was subject to question. I think the average businessman who had anything to do with the government, except the Defense Department and the Treasury, probably encountered a little of what we encountered in this Commerce Department. These fellows were hell-bent for making everything over.



If I had to make one observation about my experiences at the White House, and I've made this observation since, too, that I absolutely found no problems that would concern me in the way of dealing with the President or his Cabinet members. But I think they must have had some real problems, and I know that I would have had real problems running this business if I had a new crop all started almost on some Monday morning, all of them full of vinegar, raring to go, and they didn't all interpret their charge the same. And you would sit in with the President, and discuss what ever problem it may be he'd have a comprehension of what you were talking about. He would arrive at a answer or course of action, but somehow or another you left there and didn't find that anyone else ever got the message. Or if you did, they had other ideas. And I'm not a bit certain that this wouldn't be true with any new administration any time you turned the total leadership over. I think one of the tragedies of the government is that when you change parties that there is such a wholesale exodus and a wholesale income of people. And this would be true if it was a business or government or anything else. I think that the average businessman's apprehension had to do with, "Where do we go now?"

ALDRICH: Well, did many of you draw the moral from the Hodges episode that the Kennedy Administration was anti-business?

KAPPEL: No. It made a lot of them wonder though, and I'll tell you it didn't help that attitude any because it just was inconceivable that the people in the Commerce Department, which is the Department that business is involved in, should start right out and begin to do these things. The Commerce Department, I would say, as far as business was concerned, had no more effectiveness from that day on. We tried, but it didn't work.

ALDRICH: Then we come to the so-called steel crisis of April 1962.

KAPPEL: All I know about that is what I read in the paper. I was never involved in it and never exposed to it.



ALDRICH: However you, as part of the business community, must have felt the shock waves of that, and I wonder whether you could recall what you felt, what conclusions you drew from that?

KAPPEL: Yes. I can give you about three. Number one: I never did get too much insight into what went on in the bargaining, and so the justifications for these things I can't testify to. I think it was a most unfortunate thing that it happened because it gave a lot of business people second thoughts. It depends on what conclusions they wanted to draw from it, and it's pretty easy to draw conclusions, if you are headed in the direction, that aid and abet the very thing that had us worried.

It seems to me that it brought to the surface something, though, that is still a bad situation with business, and we're still talking about it and still meeting about it. And that is this new economic theory of guidelines. I am still of the firm opinion that it's loaded because it gives all the credit for productivity increase to the labor side and nothing to capital, and I think most businessmen think as I do that these guidelines are a price tag to start from instead of one to stop at. It's a floor instead of a ceiling. There's about that--not the way they're written and not the way they're surrounded with theory in the paper that presented them, but in the way people in government choose to use them. Of course, that began with the basic philosophy of not worrying about deficit spending and so forth. I think businessmen generally didn't consider the Kennedy Administration anti-business, but they were very much leery about the validity of that economic philosophy, and I think they still are. They had to be less than confident in an Administration who treated business with threats and labor with a feather. The steel episode was just that.

ALDRICH: I think that the question of deficit spending is another one, and what was at issue in the steel price increase was inflation and growth.



KAPPEL: Well, it's the same thing except they put all the emphasis on prices, and yet that's what I'm saying. These guidelines infer that there could be wage increases every year up to the 3 and the 2 or 3.5 they figured out. But it's impossible for a businessman not to get to the point of no return after awhile by that process unless he raises his prices. And then we've got the international competition that says if you raise them, you don't do any business, and that gets you into this balance of payments and all of the rest of the things.

I think the whole point of view of business was that this is a very one-sided affair. If you were going to be that way about business prices, you had to be tougher, you had to be equally impatient about wage prices, you can't keep putting stuff into a barrel without something blowing after awhile. I think whether the steel thing was justifiable in its own details, I wouldn't know, but I think it was a glorious example of what every businessman figured sooner or later he was going to have to face up to in one way or another. And this is going on now a little bit. We had a session just in October on the same thing with Gardner Ackley, and then we had one in the White House on this same thing. That is that you have to bear down on other things than prices if you are going to contain inflation. Otherwise you squeeze profits out of the picture to the extent that you can't finance your growth. Then everything stops. There's more to it. There's a fundamental difference between most businessmen and the government that began then with the advent of this new economic approach, not in the total sense but in this particular area. I think the businessmen got behind that tax cut after it became a reasonable tax bill. It went through all the growing pains of getting changed around, and they gave that a good push. I had a part in that.

ALDRICH: Were you directly involved with that, sir?

KAPPEL: Yes. I was a member of that committee that had to do with getting it through Congress. We gave them lots of help on it. We also supplied President Kennedy with a . . . The Business Council did something that we had never done before. One of the fundamental rules of membership was that we will never put this organization into a



position of taking a position on any political matter or be involved, as such, in any legislative pressure. We couldn't keep members. The members of the Business Council needed no encouragement to think for themselves. We had points of views among us on all sides. It's not a Republican organization like a lot of people think. We have some very lively give and take by all, but basically one of the fundamentals is there is no politics in our processes and we don't consider one's politics either as a member or in meeting. We're doing business for the good of the country.

And that particular group, I would say almost to a man, was a little upset on this inflation thing and about this new economics. We had lots of sessions with Walter Heller about it. We had a group of experts on taxes meet once in a while. But basically we put together a paper for President Kennedy at his request that did outline a tax bill that we thought most businessmen could go along with. I think about twenty of us involved ourselves in it, and we delivered it to him. It was a personal document that never saw the light of day, so far as I know, and that was our understanding with the President. This, of course, was a request. We met frequently thereafter with him and with the Secretary of the Treasury on this balance of payments problem, on the budget questions and those things. We had many contacts thru and by this organization, with him. I doubt if we'd have had any of these under the old arrangement.

ALDRICH: By becoming independent of the Commerce Department.

KAPPEL: Yes. Yes, we did. We had these liaison committees. I've forgotten who the liaison group was. One was [Thomas J., Jr.] Tom Watson, I remember. I was one, the Chairman in fact.

ALDRICH: What disparity was there, for instance, between your recommendations in the tax field and the final bill as it was passed, do you recall?

KAPPEL: No. There was great disparity between what we put together and what the Administration first proposed. We went over the bill at the request of the Secretary of the Treasury, and we had a date to talk to him about it. We met several times and had tax experts go over it, and we spent several days. The whole idea was if you don't like



this one, what would you do to it? Our whole point and our whole purpose was to meet up with the point that the tax bill is being passed to help the economy. And that's the only interest we had in it. And I think our conclusion, as we spoke among ourselves on it finally, was that if it's to help the economy and the original Administration bill is the bill that is proposed to do it, we would think the economy would be better off without a tax bill. There were a number of things in there that. . . . They got a lot of reform in it. However, the reform overwhelmed the economics of it, and our conclusion was that if you had to reform something, that's one matter. If you are really putting in a bill to help the economy and growth, we said we'd be better off leaving it alone. No bill at all.

Now, from there on the Ways and Means Committee and the rest of them went through this thing, and one thing led to another, and it turned out to be a bill not too different from our views. I've never taken the pains to check it. Ours was not in that detail. Ours was a broad, categorical description of what we might need. But the two basically met the purpose as we saw it.

ALDRICH: In brief, then, you were for a tax cut before a tax reform?

KAPPEL: That's right. I think that to cut this tax a little bit, there was an element of reform in it. This wasn't without some reform. In the final analysis, I think it would balance. But the businessman's position, mine, and the group that worked on this, and the businessmen's committee that helped put it across was simply this: That we were for this tax bill; there were things in there we wouldn't put in there, but on balance it's all right; but it will not help the economy unless you get down to work and keep this budget within balance. This is not a license to spend. You can't cut your income, raise your outgo, and expect this to help. That was our platform; that was stated in everything we did. It was on that latter area that we got into much discussion.

ALDRICH: With Walter Heller.



KAPPEL: And the President. But we didn't think this tax bill was going to be as useful as they thought it would be unless they maintained some tight control over the budget. I heard this a little while ago from Gardner Ackley--they really would say they shouldn't worry about deficits. Spend anything you need. I don't think any businessman in his right mind would buy that.

ALDRICH: How did the President express himself at these meetings--with some knowledge of economics or . . .

KAPPEL: Well, he was having great difficulties with keeping the budget down. We talked about this at great length. Of course, the budget is a very complicated piece of machinery, and there's only a small part of it that you have any control over. It's already committed or it's an expense budget and so forth. I believe that there was no question about his comprehending and accepting the ideas. The great problem was how in the devil you get from here to there with all this pressure to spend in Congress.

ALDRICH: Well, sir, could we now talk about the genesis and. . . . Have you got the time?

KAPPEL: Yes. I have a date at 3:30, to be honest with you.

ALDRICH: I see. Perhaps you could just briefly cover the Communications Satellite.

KAPPEL: Well, that one, of course, came about. . . . I suspect we brought it on ourselves, in part, because we developed Telstar. We got the idea back in 1954 when our man John Pierce presented a paper on satellites over in Paris at an international science meeting, and all we needed was a way to get it up in the air. Of course, the United States missile program was pushing along then, and they did get the capability--to wit, the Echo balloon was put up. That was also our laboratory's idea, and we used our experimental station over in Crawford Hill, New Jersey, to talk on it. I talked to Lee DuBridge at Capistrano Beach by



way of it from upstate New York almost immediately after it got up there and tried it out. But this having started, then it was inevitable that one thing would lead to another, and we built the Telstar satellites. This was during the Eisenhower Administration, and I was working very hard with them to have them launched. I sat right in this room a number of times discussing the question, "What do I have to do to get one of these launched? We'll have them built soon after the first of the year." We were building six of them. The odds of getting one up were about two in eight or something like that at the time, one in four, and we didn't know whether the first one would stand the jar. But we had them, and we wanted to get them up, and we were insistent upon paying for it. One of the major problems in government circles was how they can charge a corporation apparently.

BEGIN SIDE II TAPE I

KAPPEL: We had these satellites in the process of construction and knew when they would be ready, and there was no unwillingness on behalf of the government to launching them, but the problems were of that nature. And then the Administration changed. By that time, the dates were getting closer, and I was getting a little bit more ram-bunctious and frustrated because it just seemed to me that I sat in a position here with a business that had something, and it would be a tragedy if the Russians were to put something up next week, and we were all fiddle-diddling around here about accounting or some other unknown quantity. So we began to talk about it with [James E.] Jim Webb and with others down there. I remember in April I had made the statement to our stockholders meeting in Chicago that I was getting impatient. I gave a statement to the effect that we had these ready, and we were still fretting around about getting them up in the air.

Early in May, Jim Webb called me. In the meantime, they (NASA) had asked for bids; the government was going to build one of their own. Jim Webb called me and said that they were ready to announce this contract of the government building a satellite of their own which was a relay satellite. He was ready now to put us on the schedule for launching ours. At that time, the relay launching was to come ahead ours. They weren't going to let somebody beat them to it, I guess. There



was a strong government push for government ownership. But anyway, when the day came, the relay satellite wasn't ready to be launched.

ALDRICH: Who built the relay?

KAPPEL: RCA under government contracts. That being the case we pursued our case to the point that, now you've got the rockets, we've got the satellites, and we're not going to miss our day that was coming up. So we were ready, and it was launched, and it was the first one to be launched. And it worked, as you remember. We had offered President Kennedy the opportunity of talking over it for the first time. Someone made the decision that it wouldn't be fair to do that or he shouldn't do it or something. We then asked Lyndon Johnson if he would do it, and he did. That conversation between him and me was the first conversation from telephone to telephone via satellite that could be considered real and commercial. We also sent and received a television picture across the Atlantic that evening. Well, that was very much of a surprise because the French had a ground station and the British had a ground station, and neither of them were to be ready. We didn't put Telstar up with the expectation that they would receive anything that night, but we were ready and had been pushing and helping them get ready. But they were ready and did. Therefore, it was a total success. We sent live TV pictures over it back and forth.

Once that had been the case, it was inevitable then that something had to come of this to make it useful, and thereby the Administration bill for the satellite organization was born. Actually, we were pushing ahead on the basis that if the government would just get them up in the air for us and get these balls going around, we'd just use them like cables, like we did microwaves. But that got into politics, government ownership and all the balls of that nature were in the air. [Robert S.] Bob Kerr then took the Administration bill and made some changes in it. It was very gratifying to me that the President came out with his policy statement that this was going to be a private corporation. I think that, from my standpoint, it was a very sound decision, a very agreeable decision to us. The Comsat concept that was then in being was that it would be a carrier's carrier, that it was inconceivable, and I think it still is inconceivable, that any



private entity should be the owner of any satellites flying around. I think the government launching involvement has to be that. I don't think anyone else should have missiles. I think that's the way it should be. But now the law got all mixed up in filibusters, and Bob Kerr died, and they got to amending it for all kinds of spurious reasons.

Then about twenty Senators down there got on their horse and claimed all the art came from government expenditures. I can testify that none of it did in the satellite itself. There was nothing in there that hadn't been used in our own micro-wave system for a long time. Nevertheless, the thing got kicked around in that filibuster so that, in order to get it out of Congress and into the law, they dropped all amendments. That's the way they got the cloture vote. The result is no credit to Congress, especially the twenty or so who made it necessary to compromise the essential and basic conditions. Now, of course, it's an organization that's in a state of confusion, it seems to me, as to what the business is and how far they should go and so forth. There are many questions that are now before the FCC [Federal Communications Commission] that were visualized initially as never having to come up. I mean, the history of this legislation, in my judgment, didn't start out to be what it turned out to be.

Nevertheless, we in the Bell System have done everything we know how to make it a success. We offered to buy up to eighty million dollars worth of stock if that was necessary and to make it go in case the other carriers who were talking about very small amounts didn't come thru. We wound up with 28 per cent, fifty-eight million, because the rest of it was picked up. We did that simply because we believed that it shouldn't fail. We also said that we would take a hundred circuits in the first one they have up there. They have it up there now. We have sixty-one circuits, I believe. We'd love to have the rest of them. But that's one of the confusing things. There are some other people who have reserved forty of them, and they are using two and paying for two. We would reserve a hundred and pay for a hundred. But we only get sixty-one and are paying for sixty-one. No corporation is going to make a living unless they find a better way to sell their products than just to reserve them from somebody . . .

ALDRICH: Who is that other . . .



KAPPEL: Well, I'd rather. . . . It's the I.T. & T. [International Telephone and Telegraph] Company, I think, with forty of them, and I think RCA has ten, and so forth. What I'm saying is that these ought to be utilized. And you could. We could take the rest of them, and that would be some revenue they're not getting. But these are all fundamental things that wouldn't have happened, I think, if that original bill that was set in motion could have been consummated. So insofar as that is concerned, I think that was a good decision to launch our satellite, and I would like to record it here that it was a great sigh of relief to me that the Administration came out and let us get those satellites up there because I think that it's true that the Russians are just getting communications satellites in the air now, but they've had the capability just as long as we have.

ALDRICH: One thing I'd like to add; it's just two questions. When Communications Satellites was first being talked about, there was a conflict between what's known as the carriers and the manufacturers.

KAPPEL: Well, the manufacturers, of course, were looking for business to build these things. The carriers, at least the A. T. & T. Company, never had any intention of building any of them. I think this was one of the things that was bothering everybody. They figured if we got into this thing, we'd make our own, and they wouldn't have them. But we never had any intention of making a satellite. We had to build the first ones. They were laboratory models. It came out basically that way. General Electric Company, I think, was one of those that was pushing that. I don't think they were very serious about it. After awhile they kind of pulled in their horns on that. The same is true right now. Everybody's getting in the act. But the fact of the matter is that the thing could never be anything else but an international system because its economy is over oceans, and there's somebody else that has the telephone business in every country, and mostly governments, and they have to be half owners in it in order to use it, the same way we're in business with our cables. There's someone on the other end that owns half of it; we own our half, and they own their half.



ALDRICH: Do you see any threat to your cables from the satellite?

KAPPEL: Well, yes. To cables, yes. I think it's a matter of economics, and I think the southern hemisphere of the world will be much benefited. The satellite is a blessing to that part of the world. It can get circuits to far off places because distance is no factor, and costs of building cable is in direct proportion to distance. I think on the big routes like between here and Europe we'd have the right answer if we used them both. So we don't have all our money and our service in the same bag, so to speak. That's our version of it. Of course, we'd like to buy in on that, and if someone were to think exclusively in terms of these satellites, sure there would be the cables. But that's what we're using the hundred for. It just saves us putting another cable down. And if this is a feasible circuitry and the economics are right, we're an eager customer. There is no question about that. I think that we've got some things to resolve. We are still studying whether these high type satellites are going to be satisfactory.

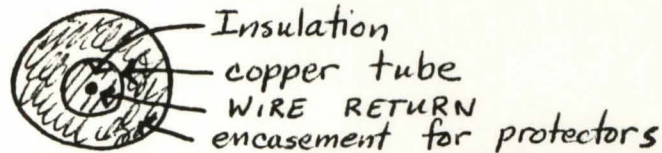
ALDRICH: The echo.

KAPPEL: But I think it is. I haven't any question in my mind about it. But it's a very limited one up there now. I think these satellites have great possibilities, and I don't think they'll experiment anymore. I think it's like everything else. They find that the odds now are one in twelve chances of missing. The costs are coming down. I think they're very economical. By the same token, we can build a big cable now with transistors that will give us seven hundred and fifty channels across the Atlantic in total. We have about six hundred, I think, working between here and Europe.

ALDRICH: Is one channel per call? You can only use one. In other words, you can only have six hundred telephone conversations?



KAPPEL: Yes. But the cable looks like this.



The working part of the cable is just that middle conductor and its copper winding. All the voices that come through lots of equipment are all modulated and demodulated and put through there on a whistle, and they flow on the inside of this copper tube in one direction, then they return on this. And they go through a repeater every so often to amplify it, boost it up. The first cable could handle thirty-six channels, that's all. It was thirty-six channels. Then we developed and built what we call TASI. TASI is a complex electronic sampling procedure that takes samples of many channels at millionths of a second intervals, sends the samples indiscriminately over the batch of channels and brings them back together at the other end by taking advantage of the sampling and the intra-circuit time made available. This about doubles the cable carrying capability. Then the next cable came along with a little different equipment on it and we're getting a hundred and twenty-eight channels, with TASI applied more than 128. The first system had tow cables to get the thirty-six. Now we have one cable to get a hundred and twenty-eight.

Then the next adventure, of course, is the one I just mentioned--seven hundred and fifty. So this is moving just like everything else. You don't visualize this as wires, you see. It's just like sending radio channels through a pipe. You operate entirely within the cable and the frequencies give or take no interference beyond the lines of the pipe. It uses very high frequency short waves. Here's another one. It is conceivable that we can put 400,000 channels through a 2" pipe one of these days. The art is coming and I believe will be available when and if we need it. Satellites will not be the only answer and will always be teamed up with cables, for economic and service reliability reasons.