

NASA JOHNSON SPACE CENTER ORAL HISTORY TRANSCRIPT

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WILLIAM R. KELLY
INTERVIEWED BY SANDRA L. JOHNSON
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JOHNSON: Today is February 5th, 2002. This oral history with Bill Kelly is being conducted in the offices of SIGNAL Corporation in Houston, Texas, for the Johnson Space Center Oral History Project. The interviewer is Sandra Johnson, assisted by Summer Bergen and Jennifer Ross-Nazzal.

I want to thank you again for joining us today to share your history and experiences during your more than thirty years with NASA. I'd like to begin by asking you about your background, where you grew up, where you went to school.

KELLY: Okay. Well, I was born on December 13th, 1931, in Atlanta, Georgia. I stayed in Atlanta through the tenth grade in high school, where my dad got transferred to Memphis, Tennessee, which is where I finished high school.

Then I went back to Atlanta, Georgia, to go to Georgia Tech [Georgia Institute of Technology]. I graduated from Georgia Tech in 1953. I graduated one day and reported to the Navy the next at Pensacola [Florida] and went through flight training with the Navy, got my wings in September 1954. I joined Fighter Squadron 54, and I was with the Navy then until 1956, September of '56. I was stationed at Miramar [United States Navy Air Station], which is, if anybody watches, *Top Gun*.

After I got out of the Navy, I went to work for the General Electric Company [GE] in Cincinnati, Ohio, in the Jet Engine Department, wanting to stay close to aviation. I was there for

six years, when I moved to NASA here in Houston in 1962. Now, how far do you want to go?

JOHNSON: That's fine. Did you have any interest in aviation when you were in school, or what made you want to join the Navy?

KELLY: In high school I was Army ROTC [Reserve Officer Training Corps] and had an appointment to West Point [United States Military Academy at West Point, New York], and I took all the examinations, and I flunked the physical for malocclusion, severe overbite, so I couldn't be a soldier in the trenches because I couldn't eat, I guess, but naval aviation didn't seem to care. [Laughs]

So when I didn't get that, a high school football coach asked me if I would be interested in joining the naval reserve at Millington Naval Air Station, which is in Memphis [Tennessee]. He was a lieutenant in that, and they were having an eight-week camp, and he wanted me to go because I knew something about military ROTC. So I said, "Sure, I'd do that." So I did that for eight weeks and kind of liked it, and switched kind of Army to Navy.

When I went to Georgia Tech, which is a land-grant college, you have to be in the military unless you've been in the service or have physical conditions, I went to Naval ROTC, got a Navy scholarship. Then when I graduated, I decided I wanted to be Naval aviation, if I could, and was lucky enough to be immediately taken into flight training.

JOHNSON: What did you fly while you were in the Navy?

KELLY: I flew [Douglas] AD Skyraiders. It's an attack bomber, a single place, but carrier-

based. In fact, flew off the [USS] *Kearsarge*, which later on was in the space program. I forget which flights, but it did pick up some astronauts at sea.

JOHNSON: Did you have any idea that you would eventually want to work in an aviation-type job as far as going to GE?

KELLY: Yes. In fact, GE was an aviation-type job. It was jet engines. I specifically looked for people—I talked to Convair [Division of General Dynamics Corporation] in San Diego and people like that, and Lockheed [Aircraft Corporation] in Georgia, because my home was Georgia, and I was stationed in San Diego. It was two natural people to ask. I wrote General Electric, and when I went there I liked it best, so I went to GE.

JOHNSON: What were your positions there?

KELLY: Well, at GE I was test engineer, systems and accessories test engineer.

JOHNSON: What did that entail?

KELLY: Well, you'd take basically failed products, products that had failed in the field, and you'd bring them into the General Electric plant, and we'd test them, try to figure out why it failed and what remedies there were to fix them so they wouldn't fail in the future. That's always going on. So, I mean, it's not failure to where it's killing somebody in a sense, but you've got to get it fixed.

JOHNSON: Is that the only position you held at GE?

KELLY: Well, yes, test engineer for six years, one form or another. You'd move from one system to another, the more mature you got and the more you knew. You'd start out with simple lube systems and move on to control systems and things like that.

JOHNSON: Did you work on the J-79?

KELLY: J-79 jet engine, yes.

JOHNSON: Can you share a little bit about that.

KELLY: Well, I mean, the controls and accessories of that. The total engine I didn't deal with, but I did do the fuel systems and the afterburner fuel control systems and all the lube systems and hydraulic systems. Sooner or later I had all of those in the test world. When I applied to NASA, they loved that because you have to write reports, and they were looking for report writers. I hated writing reports, but I wanted the job. [Laughs]

JOHNSON: So that's what brought you to NASA?

KELLY: Well, I wanted to be part of the space program. I had a friend that had come down in early [19]'62 from Cincinnati, [Ohio] and he talked so much about it, I said, "Shoot, that seems

like the place to be,” so I just applied. They were hiring a lot of people at those times.

It was kind of funny, because the guy called me up to offer me the job, and when we were talking, I asked him if he knew Jack [Francis J.] Skinner, who was my friend that had come down in March. He said, “Yes, I’m looking at him right now. Do you know Jack?” They were in the same office, so it was kind of funny.

JOHNSON: Who was it that you talked to?

KELLY: John [H.] Boynton was the guy that called me up. I don’t know where John is today. I think he’s still in Houston [Texas] someplace. But he left NASA early, as did Jack. Neither one of those stayed through retirement.

JOHNSON: And they were looking for people that could write?

KELLY: Yes. Mercury Project Office was looking for people to do post launch reports and mission rules, which is the job I got, along with John. That was what John did also. We’d go down the day after launch unfortunately, instead of the day before launch, and stay there for up to a month getting reports written. In essence, we were the editors more than writers, because people that knew the systems would write it, and then John and I would have to sit down with them and make it make sense and stick it into a book and publish it, two versions, generally a public version and a classified version, since the missiles were classified, the Atlas missiles.

JOHNSON: That was the Mercury Program, correct?

KELLY: Right. When Mercury ended, I went into the Apollo Program, working for Tom [J. Thomas] Markley in Program Control.

JOHNSON: What was your position when you first moved?

KELLY: Well, after I first moved there, it was just probably a program analyst or budget analyst. I can't remember. We are all called ASTs, aerospace technologists. I went into the Command Service Module Branch under Clint [Clinton] Taylor, and dealing with [North American] Rockwell [Corporation] in their budgets and scheduling and that type of thing, essentially the business management part.

JOHNSON: You'd gotten your MBA [Master of Business Administration] while you were still at GE, correct?

KELLY: I had all but six hours when I moved to Houston, so I went to the University of Houston [Houston, Texas] and took the last six hours and transferred them back to Xavier University in Cincinnati [Ohio], which Xavier was good about that. They knew that people came and went. Their biggest clients were GE and Proctor and Gamble, and so when I had to go, I talked to them. Most universities, I guess, don't allow you to transfer in the last hours. Maybe you can bring some with you, but it didn't bother [Xavier]. They told me to go down, the University of Houston had a fine business program, and to pick out a couple of courses, call back and get approval. That's what I did. So I graduated in 19, I think it was, 64. On the books it's '64.

JOHNSON: So that helped, I assume, with your evolving duties.

KELLY: Well, yes, you had accounting and economics, right. Right. Because I ended up going on the administrative side of NASA. In Mercury it was not the administrative side. I mean, it was tech [technical] writing, but my first opportunity to get out of writing reports, so it was worth going to the Apollo Program. [Laughs]

JOHNSON: Could you share some details about some of the things you worked on at first when you were assistant to the chief?

KELLY: Yes. I became Assistant Chief to Clint Taylor in the command and service module, and our big thing was change orders. We were on the technical end of the change order. The procurement people did the contracts work, but somebody has to go and look at the contractors' proposals and what they say it's going to cost. My job, in that case with North American [Rockwell Corporation], for the most part, was to get the technical engineers together and all of us sit down and dissect what they've said and come up with a counterproposal or accept theirs, whatever it would be, and that was the job and then putting budgets together every year to cover all that stuff. That was what we did in the Command and Service Module Program.

I was there a couple years when I moved to the guidance and navigation part. I'm trying to remember what the name of that branch was. It was a long name. [Spacecraft Support Systems Contract Engineering Branch]

JOHNSON: Guidance, Navigation and Acceptance, is that checkout equipment?

KELLY: Yes. ACE is Acceptance Checkout Equipment, right. That's what was in that branch, but I was the branch chief of that branch.

I guess the devastating thing that happened then it was the Apollo fire. The board to look into it was here at JSC [Johnson Space Center, Houston, Texas], and we set up a set of folks to support that board, on the administrative side, which I was the chairman of, having typists to do reports, having procurement people to make acquisitions, if we needed to, and that type of thing. So that went on long days seven days a week until that board inquiry was over and the reports were written. That was sad days, but it happened.

JOHNSON: When you first started working in that area and you were working with North American, was the working relationship, was that a good relationship?

KELLY: Oh, yes. In my opinion, the NASA philosophy at the time was it's all business across the table, but once we have come to the conclusion of what that is and come to an agreement, we've got to march in step to make this program work, and that's what we did. So it was very business negotiations, hey, no quarter. You're going to try to make it right, absolutely right, but then once you've got that agreement, you've got to work together. You don't want to keep fighting and be antagonistic [or you won't] pull that program off.

JOHNSON: What were some of the challenges of getting that contract?

KELLY: Oh, gosh, money and schedules, no question about it. The president said we're going to do it by the end of the decade, and you have this major problem in 1966. I would imagine that most of America did not believe we'd make it by the end of the decade once we had the fire problem, but the NASA people buckled down and said, "That's just another challenge we're going to overcome," and we did.

I guess, unfortunately, the program manager, Joe [Joseph F.] Shea, couldn't stay around. [It was] not his desire. I believe he wanted to stay, but they moved him. Joe was really, really one fine program manager. I really enjoyed working for him. But George [M.] Low was put in charge, and George also was a very, very strong individual, strong program manager. He stepped down [from the Deputy Center Director's job]. I don't know how we do all this, but I got a story about George I'd like to tell.

JOHNSON: Go ahead.

KELLY: I tell it because he did. After the Gemini flights, NASA would have open house in the auditorium and the astronauts would show their films and all the NASA families would show up. At one of those, because I would go to them, even though I was never part of the Gemini Program direct. We had some in-laws here, so we took them over there to see all that. So when we were leaving, it was kind of dusk and dark, and I saw a little boy standing over there crying, and then I went over and said, "What's the matter? Did your mom and dad leave you or something?"

He said, "Yes," he says.

"Well, what's your name?"

He says, “Well, my name is John Low.”

I said, “Oh, are you George Low’s son?”

He said, “Yes.”

I said, “That’s okay. I live in Friendswood [Texas]. George lives in Friendswood. Let’s go on over, and we’ll call home and I’ll take you home.”

So I called, and George answered. I told George, “You don’t know me, who I am. I’ve got little John. I’m fixing to bring him home.”

He said, “Oh, did his mama leave him?” She and Leah North, who was the wife of another good NASA troop, and they had a bunch of kids together, had gone for pizza and little John got left in the shuffle. So I took him home, and that’s how I met him. That’s how I met George Low for the first time. That was before Apollo, he took over Apollo.

When he did take over in Apollo, we were having a Christmas party, and I had gone up to say hello to actually some other people, because I really didn’t know George that well still. The only time I’d ever met was right there. So I had gone to see Joe [Joseph N.] Kotanchik—and hopefully you’ll find him in the record somewhere—and Joe asked me, “Do you know George?” Now, what runs through your mind? Do I say yes, because they left the kid, or what do you say? No? I didn’t have a chance.

George said, “Oh, yes, Bill and I met. Bill found John,” and he tells everybody there the story about John. He repeated that story again and in forums that I was in. Once when he was a speaker at Williamsburg, Virginia, for a big conference, he saw me in the audience. He said, “Oh, there’s Bill Kelly. I want to tell you a little story.” Didn’t bug him at all. Just really, really a good man.

When he passed away—and I don’t remember the year—he was president at that time of

Rensselaer Polytech [Polytechnic Institute, Troy, New York]. A bunch of us went to his funeral up in—I believe it was Troy, New York. As we were going through the little reception line with his wife and kids, I came to his wife. She said, “Bill,” gave her a little hug, and she said, “John’s the one down on the end.” [Laughs] So I went all the way to the end.

JOHNSON: Did he remember being left behind?

KELLY: Yes. He remembered. That was an interesting story.

JOHNSON: Yes. It’s interesting that he wanted to share that with people, too.

KELLY: He wasn’t ashamed of it.

JOHNSON: He didn’t feel bad.

KELLY: Shoot, no. He was having fun.

JOHNSON: Are there any other significant events or anything while you were working in that area, other than the Apollo 1 fire, that stand out?

KELLY: Well, that was obviously the worst. Well, and then after, obviously, after you finally did make it on Apollo 11, I was fortunate enough to get a Manned Flight Awareness Award and go to see Apollo 12.

JOHNSON: Wonderful.

KELLY: NASA does not let many employees see launches if you're out of town. You don't hold meetings at that time or anything, because it's not where you're supposed to be. But we do still have the Manned Flight Awareness Program, and so I did see Apollo 12. Apollo 12 is the one that launched in an overcast, so you didn't see it long. Zip and it's in the clouds. It got hit by lightning, so it had a little bit of a [problem]. But we didn't know that on the ground, because we . . . get in the bus, and it takes you a couple hours to get back to the hotel. So that was kind of an interesting one.

JOHNSON: You moved to the project officer for the Apollo Spacecraft Program Office?

KELLY: Well, the branch chiefs of the Program Control contract engineering branches in program control were the project officers. In other words, they signed the technical direction to the contractors. They didn't write it. It was prepared by engineers, but the signature was mine. You saved the program manager's signature for stuff you really want to get their attention. Gosh, I'll bet you if you could just see the stack of tech management letters, especially when it's to Rockwell. I was never the project officer for Rockwell, but I was for the guidance systems, MIT [Massachusetts Institute of Technology] and Kollsman [Inc.] and Raytheon [Company] and General Motors [Corporation], which built part of it. There was just hundreds and hundreds and hundreds of correspondence, technical correspondence. Program manager is no way going to get involved in that, and you don't want him to be in this little daily routine. But when there's a

big—you've done something really great or really wrong, you want the program manager's signature to come out there because it's big impact.

In fact, I was one time with Clint Taylor when I was in the Apollo Program Office, while I was assistant to him and he was the project officer and all that. We went to North American, and I'll use Rockwell interchangeably because they did become Rockwell, so it's just kind of that way. Somebody came up to the hall and introduced himself and says, "I just wanted to greet the guy that was signing all them letters." [Laughter]

JOHNSON: While you were there, of course, you mentioned getting to see the Apollo 12. Do you remember anything about Apollo 8?

KELLY: Oh, yes. That's the one where we went around the Moon. That decision alone probably allowed us to make it in [19] '69, make it on time. Any speeches that I made after Apollo 8 I would always use the Moonrise, or the Earthrise, I guess. They were going around the Moon, so it was Earthrise. The picture, I'm sure you've seen it. I just thought that was one of the greatest pictures ever made, and so you'd use that. I'd use that in speeches. So, yes, that's what Apollo 8 was. It was a lot of guts to decide we're going to do that this quick.

JOHNSON: Do you remember where you were? Were you at home?

KELLY: Oh, my goodness. No, I sure don't. I really don't. I know [Apollo] 11, 11 we were all on our den floor, all of them, my wife, three kids, we were all sitting just pins and needles watching TV. But I don't remember 8.

JOHNSON: Of course, Apollo 11 was very significant, everybody remembers.

KELLY: Oh, absolutely, absolutely. Tremendous. I mean, gosh, you're sitting there, are we going to do this? [Laughs]

JOHNSON: Did the public reaction to actually walking on the Moon and the interest in the space program at that time, did that help your job?

KELLY: Oh, yes, sure. I think everybody was with you then. Very few things, I guess, can unite everybody spontaneously, but I believe that did. I really believe it did. I mean, it's fantastic. People just—the outpouring. That's a big, big feat. Even our enemies, I think, still had to have very much respect for that accomplishment.

JOHNSON: Of course, you were branch chief at that time.

KELLY: Yes. Yes.

JOHNSON: I think you were from 1969.

KELLY: Yes, I was a branch chief, right.

JOHNSON: About that time, 1970, you moved to the Institutional Resources and Procurement

Division.

KELLY: Yes. A division chief job was open and was competed. To my knowledge, I had never met, I knew who he was, the director of administration, which was a guy name Philip Whitbeck. So I applied for the job. I did know his deputy, which was Joe [Joseph V.] Piland, because Joe had been in the Mercury Project Office, and I got selected for the job. You kind of say, well, why did you get out of the program office? Well, I liked the program office, but this was a job, it was a division chief's job. There were 102 people in that division. That's a huge number of people. I mean, my branch had twenty, twenty-one, and I didn't know if I could do a hundred. So how are you going to know if you don't go try?

So I did that, and it was a slight change, but, again, that division was procurement and budgeting. It was a dual division. Budgeting, I had done. I had not done procurement from the procuring side. I never was a buyer, never was a contracting officer. But I had done it from the technical side in support of procurement, so I felt I could qualify for it, and I got it.

JOHNSON: This was a new division at that time?

KELLY: Yes, this was a newly created division. Phil Whitbeck wanted to experiment with procurement and budgets together and trying to get one to do some of the other's job and vice versa. We gave it a try. It wasn't a very good thing to do. Phil is a very smart guy. You give it a try. If it don't work, well, you go back to tradition, separate things for procurement, separate things for budgets. But we tried it. The budget people weren't interested in procurement. The procurement people weren't interested in budget. So it was kind of a bad marriage. But we had

a good time at it for a while.

JOHNSON: So that division just didn't—I think you were there from [19]'70 to '71 when you left. Was that the end of it?

KELLY: No, no, I didn't leave. What happened was is Phil reorganized and he had an assistant director for procurement that he put together, and I got that job. Parker [L.] Carroll, who was my deputy, took over the division, so the division kept going at that time. I stayed in that job only about a year, when [Lieutenant] General [Frank A.] Bogart, who was the Center's associate director, kind of the business director, retired and Dr. [Christopher C.] Kraft asked me to come up on his staff as a management assistant. He didn't any longer have an associate director for management or something like that. So I went up on his staff as a management assistant. It's kind of funny, I told Chris, I said, "Oh, no, I've never been on a staff. I've always been in the line, and I'm not sure I'll know when or what I can do."

His answer was, "Bill, at the level of staff you're on, you can do anything you want."

[Laughs]

So I stayed there nine years, until Phil Whitbeck retired, and then Chris put me in as the director of administration replacing Phil Whitbeck.

JOHNSON: At that time when you were working there, that was [19]'71, '72?

KELLY: Till [19]'81—gosh, what?

JOHNSON: [19]‘81.

KELLY: ‘81, yes, when Phil left. He retired.

JOHNSON: When you first started, that was the end of Apollo and the beginning of Skylab.

KELLY: Skylab. Then Shuttle.

JOHNSON: Did you have anything to do with Skylab?

KELLY: No. Not in terms of Program Office, no. I was on the director’s staff, senior staff, and, in essence, worried about the business aspects of things for Chris. I had been a budget officer for Chris in the Apollo Program. Guidance and navigation and all that kind of stuff and mission operations, the budget officers, so to speak, project officers remained in the Program Office, had dual—you had dual bosses. The program manager was my boss, but I sure had to make Dr. Kraft happy, because it was his budget over there, but it was managed by the Program Office. Managed is a little term not quite right. We assembled it and defended it and helped keep it going right. So I had done that for Chris for several years, and so when the time came, he asked me to come up there, which I was flattered to do.

He’s just obviously one of my favorite people, Chris Kraft. When we did Space Center Houston [Houston, Texas], which we will get to some day, why, that’s the first guy I wanted as an outside director. He was really an inside director, but he was an outside at that time because he was a civilian. It was the first guy. Hal [Harold S.] Stall and I said, “Hey, we got to have

him.” He graciously agreed to come aboard and stayed with us until I retired.

JOHNSON: At that time when you first started in that position, as I said, the things were changing, the Shuttle was starting up. What was the budgetary climate like at that time?

KELLY: It went down, mainly because the development essentially in the Apollo Program was gone. You already had everything developed. In fact, the first layoffs came when I was the division chief, the first that I can ever remember at JSC, so that was in 1970. But you had a significant loss of more contractors than government employees. But, yes, your budgets were going down.

JOHNSON: How did that affect the feeling?

KELLY: Well, you don’t ever like to see people leave or have layoffs, but it happens, and you work through it. I don’t remember any big trauma about it. It was trauma to have to tell people, “Hey, you’re being laid off.” RIF, I guess is the name, reduction in force. That’s not a fun thing to do, especially when you’re not doing it because he couldn’t do the job, you’re doing it because of lack of funds. But that happens in every program sooner or later and in every job sooner or later, I guess. If I can believe the headlines in this morning’s paper, it looks like it’s going to happen again.

What you have to do, and I will assume that that’s what will happen again, you have enough notice as to when and how it’s got to happen that you allow attrition to do the most part of it for you. That way it’s a lot less traumatic. But I don’t remember any real things. It was

some exciting things to do. Skylab and then the Apollo-Soyuz Project, things like that with the Russians, I don't know, it was just a great career.

JOHNSON: The transition, I'm sure it created some differences in the way of the working environment and as far as contracts and that sort of thing. Can you share a little bit about the contracts?

KELLY: Well, most of them are long-term contracts to start with, and you've already shown they're going to be going down. I mean, they're obviously that way. So, unfortunately, contractors live and breathe contract, and they've got to win them or lose them. Those in the manufacturing business, when the program is over, there's still going to be some residual stuff, but I mean, the big stuff's over. They've got to hope they're going to win the next one, and then, as the case of Rockwell, they did win the Shuttle. Some contractors, though, didn't have much business after the Apollo Program, with the Shuttle Program. But Rockwell, which was the main one, did. They had both of them.

The biggest program, again, is friends you know have to go on the street, because that's the way it is. I've been asked in my life, "Would you have rather been a worker around on one of the contractors?"

I said, "Absolutely not. I don't believe I could take every three years wondering if I was going to have a job tomorrow." Because that's what happened, every three to five years you recompute. Obviously incumbents have advantages of being incumbents, just like anything else, but they change out very frequently. They get complacent or just don't do as good a job. So I'd rather be on the government side.

JOHNSON: Did you have a role in the real-time computer complex competition?

KELLY: Well, yes, you have a role in the sense that my procurement people are the buyers and we had a group which reviewed all Source Board reports, let's put it that way. They would go through a group that I chaired. We're not trying to tell them, "You don't evaluate it right," but we're trying to make sure they abided by the rules they said they were going to abide by. Because when you put together a proposal, you also put together an evaluation plan, and that's what you must do. You can't start drifting away just because of the proposals you got. You've got to be fair with all the offers or the bidders.

I chaired that group, which was called Senior Advisor Group, SAG by initials, and so we did that with every Source Board, review their stuff before it would go to the selection official, which the local selections was generally Dr. Kraft or whoever the Center Director was at the time. But some big ones had to go to [NASA] Headquarters, like Shuttle, Space Station.

JOHNSON: Was that project the real-time computer complex?

KELLY: That was the building, the facility.

JOHNSON: Was it unique in any way?

KELLY: No. I mean, it's strictly a building with raised floors and a whole bunch of computer cables. You're going to stick computers in it. I mean, there's nothing exotic about it.

JOHNSON: You moved in [19]‘81 to the Director of Administration and Programs Support, is that correct?

KELLY: Right. Yes.

JOHNSON: Can you tell us about your responsibilities there?

KELLY: Oversight. Oversight of divisions who are doing procurement and budgets and finance and accounting, comptroller functions. It was a huge operation. So my function is to be the oversight for it and a direction, policy directions to them, and make sure they keep on top of it. So it was a big directorate, I’m going to guess 350, 400 civil servants and probably not very many contractors, a few, the admin directorate.

Later on when it changed to Center Operations or Director of Center Support, where administration reported there, as well as center operations reported there, as well as White Sands, New Mexico, reported there, then just probably eight or 900 civil servants and several thousands of contractors. But the function is oversight, direction, policy, and as a member of the senior staff, making sure we know what the rest of the things are doing so we’re doing our part.

JOHNSON: Do you have any other instances or memories or anything about that position that come to mind? You had a role in consolidating the sixteen, I believe, major Space Shuttle operations support contracts into one contract.

KELLY: NASA, in essence, is an interesting entity. It goes into the consolidation-deconsolidation mode about every five years maybe or something like that, so, yes. That's a matter of getting the people who use those contractors together and being able to put together statements of work that satisfy everybody and have less contractors.

But, again, like I say, we'll have a consolidation mode. Then we'll say, "No, that's not good. Now we've going to have one person." Then we can't find a competitor, so we break it back out again so we can have little competing pieces. Also, the bigger they are, the harder they are to do some of the social work of the country, which is 8-A Program, contractors minority and women. I mean, if all you're going to do is have these big contracts, you're not going to have very many direct contracts that a minority- or female-owned small business can do.

So that's about as much as I can say with that. None of them were all that specifically difficult in terms of the physical packaging or depackaging. Where the difficulty comes is with the individuals who don't want to give up my contractor. You know, "I don't want to be a part of that big thing." But those come down as policy decisions from Headquarters, usually are from the Center Director, and that's what you're going to do. They'll all jump into line once they understand that's the way it's going to be. But they're not that difficult, like I say, in mechanics. It's more difficult in people.

JOHNSON: In dealing with the people?

KELLY: Oh, yes. What are you going to do if somebody says, "Hey, you got a guy and I got a guy, we're going to put them together and do it differently"?

"Well, I don't want to do that. I like this one over here. I don't want that one over

there.”

That’s the way it happens. But it’s usually done in the name of efficiencies, synergism, trying to get rid of duplicates, and the almighty dollar, save a buck. I’m in favor of that. Shoot, man, if you can get the job done for less, that means you can do more of something else. I think, though, there are times when you make the consolidation there to where if you don’t have a competitor that can do that, then I don’t believe you save much money.

JOHNSON: Speaking of money, NASA’s budget continued to shrink during that time, is that true?

KELLY: It’s hard for me to remember exact numbers, but I think you shrank and then start staying and then you start getting cost-of-living increases. But once you picked up another program, then your budget had to go up. So as soon as you got through with Apollo and it started to go down a bit, Shuttle is going to bring her back. Well, then Shuttle gets there, and then Station is going to come on now. Right now there’s—at least I don’t know of anything on the horizon past Station, obviously at this point in time. Hopefully there will be Moon missions, Mars missions. I hope there will be, but once you get all that stuff up there, it doesn’t take as much to operate as it does to have developed, and so budgets are expected to change. I think the ones today are obviously bigger than I remember them being, but it’s inflated dollars over the numbers that I used to play with, too.

JOHNSON: As the budgets change, how do you think you managed to keep the level of excellence with JSC up there? By consolidation?

KELLY: Well, you consolidate in the contractors' facilities, and those are, I don't believe, as difficult to keep the best people, just like with JSC. I think people want to work in the space business so all you've got to do is make sure you hire those that can do the right thing, because it's still a very exciting place to be. I mean, even though people keep sounding like they're going to death knell it every time they turn around, it's an exciting part, to fly in space. So I don't think we've ever had a problem saying we can't keep the right people to do the work. I read in papers where companies like Enron [Corporation], unfortunately, big bonuses to keep the right people on the job. The government can't do that, so it has to be the project, what you're working on. I still think it's a career that people walk away from and just love the atmosphere.

The thing I've always liked about JSC was that knowledge wins. You need to be open with each other. You get into a meeting. you argue it out, and you try to come to the right decision. You don't try to say unnecessarily rank has its privileges. The technical knowledge has got to be correct. And I think that's what the directors at the Johnson Space Center did. They gave people rope. Speak your piece. You're not going to get chopped down just because you spoke up. I mean, if everybody is a yes man, you're not really sure you got it right.

So I admired every director I worked for, because I think they all did a very good job of that. I was telling a little story about Chris Kraft and Source Boards. Things are going to pop into your mind. I'm sure everybody does.

JOHNSON: No, go ahead. No, that's what we want.

KELLY: But the Source Board was presenting one which included all of the blue-collar-type things, all the carpenters and that stuff, which we hire. We don't have civil servants, generally.

Chris asked the guy making the presentation, he says, “I’m listening to all this, but how do I know the carpenter can hit a nail? I mean, I’ve got all the paper stuff here. How do I know he knows how to do the job?” Which was kind of a sobering question, kind of an obvious question to ask, but nobody ever asked it.

That started at least JSC into requiring some demonstration types of things in our solicitations. If we needed a TV [contractor], the people going to run the television stuff, “Show us some films you’ve produced.” If you’re going to run a photo lab, we’d give them problems on chemical mixes and things. I mean, it was not just like they could just say, “I can do it.” They have got to have some form of demonstration that the carpenter can hit the nail. So I think that was a tremendous comment and asset to our procurement methods.

JOHNSON: It changed the way of doing business.

KELLY: Yes. It made us try to answer that question or have the contractor answer the question for whatever the specific job was, didn’t have to just be a carpenter. That just kind of popped up because I thought it was pretty unique at that time.

JOHNSON: Were the contractors okay with that, or was there any resistance?

KELLY: Sure. Oh, yes. Hey, the good ones were. If Sears-Roebuck—pardon Sears—but maybe wanted to build a spacecraft, they might have liked it because they could probably write a nice proposal, but they can’t show that they can do it. Performance is a big thing. You do have that also in any proposal. You get references and things to check on their performance of similar

work, so that's a good addition.

JOHNSON: Yes, I can see that it makes a lot of sense. It's one of those "duh" moments.

[Laughs]

KELLY: Yes. Yes.

JOHNSON: It definitely makes sense.

KELLY: Well, you've got to ask the question that—I don't want to say this wrong. Most people wouldn't ask that question, because they would think it would look dumb. The smart people would ask that question. And Chris just pointedly said, "How do I know that? I've got to make a decision here, and you haven't proved it to me yet," in essence is what he was saying.

JOHNSON: The atmosphere, as you said, was open for that sort of thing.

KELLY: Sure. Sure. Oh, absolutely. Sure. I don't believe any contractor would argue that.

JOHNSON: During that time period, you helped or you developed a program for JSC managers and the University of Colorado [Boulder, Colorado]. Do you want to talk about that a little bit?

KELLY: Well, actually, Phil Whitbeck was the father of that. It was a doctoral program that he established with the University of Colorado, where the professors at the University of Colorado

came down here and taught classes Fridays and Saturdays, and then we would spend one month at one of the Colorado campuses, the campus of our choice, as it turned out, for anybody in the program. I was in the program. We went to Boulder. So we spent a month in Boulder taking a course a week. So it was an accelerated program in that sense. Most of them for doctoral programs want residency, and that satisfied the residency requirements, because that's the only courses we took at the school. Every other course was here at the Johnson Space Center. It led to a doctorate in public administration.

There's a little quip about that, too, because my daughters made up a nameplate for my desk, William R. Kelly, and under it is "ABD." I'm in my office, by the way, talking to—I wish I could remember his name. I should have looked it up—the professor from [Texas] A&M [University] that wrote that last history that I was familiar with. We were talking, and all of sudden he said, "Bill," he said, "I thought I knew every degree in the book, but I don't know what ABD is."

I said, "All But Dissertation." [Laughs] And he said he'd never heard that. I said, "Gosh, I thought that was pretty common." I never did my dissertation, so I didn't get the doctorate. I did all the class work, but I never wrote the paper.

JOHNSON: That's a new one.

KELLY: I've still got that at home somewhere. I said, "There's more of us than Ph.D.'s."

JOHNSON: Probably so.

Another program, I believe, is the NASA Goals and Objectives Program you developed

at JSC.

KELLY: Gosh, I don't remember that.

JOHNSON: The notes I have say it was "Designed to ensure that Center resources are effectively focused to achieve NASA's eight major agency goals." Does that ring a bell?

KELLY: No. [Laughter] Do I blame that one on age and memory? [Laughter]

JOHNSON: Maybe bad research, we don't know. Well, I guess we won't talk about that one.

KELLY: Well, there's lots of things that other people remember. You don't remember these kinds of things, lots of times. I chaired several committees, NASA-wide committees, because NASA, when they want a specific thing done, they go to the Centers, usually, and so I got named a few times as manpower times and other kind of things.

I can remember in one instance, a guy from Headquarters named Don Hess, I would always ask for Don to be on my committee. Don passed away here a couple of years ago, but he also left Headquarters and came and worked for me here at JSC, as did his wife, who was secretary to one of my division chiefs, and who is still in the Houston area. But we had finished whatever we were doing, and we were at the Cape at that final meeting. Don said he had a presentation to make, and he handed me a medal, and this medal said, "Last Place Champ." So I've kept that as my memento, the last place champ. So I don't know, one of those may have been one of those kinds of things, I just don't remember.

JOHNSON: I think they talked about the waterfall flow-down approach. Okay. Not important.

Well, we have another one here, the JSC Productivity Improvement Program. It's between the Center and the contractor workforce, to get the awareness between JSC and the contractors.

KELLY: I don't remember a specific program on that.

JOHNSON: Was that ever a problem, getting the contractors and the JSC employees to work together?

KELLY: Well, I'm sure it's always a problem at some level, but again the whole philosophy, I think, made things work, be business across the table, then get together and go make it work. But I don't believe that I am aware of any time we can't get them to do what we want them to do and things like that. There may be differences of opinions of how to do something and so with the atmosphere that we have, you can do that argument or that discussion. But I don't remember anything that says, well, we can't get them to even do what they're supposed to do. I don't remember that at all. I mean, somebody may have had a problem individually on a specific, but the contractor workforce, individuals and management, were very highly professional folks. I mean, they were very respected folks.

JOHNSON: You had a part in developing a program between NASA and the University of Houston Clear Lake [Houston, Texas], to share research?

KELLY: Well, the contractual arrangements were under me, yes. Yes. But in essence, the research folks sat with their research folks to decide what we're going to do. The tying of the legality comes with us, I mean comes with my groups, not the decisions as to what they're going to do, I mean, because obviously those are made by the researchers themselves. Yes, we had some good relationship with the University of Houston at Clear Lake. Sure did.

JOHNSON: In 1983, you became the Director of Center Support.

KELLY: Yes, under Gerry [Gerald D.] Griffin.

JOHNSON: What were your responsibilities?

KELLY: Well, that's when we took the administration, which I had. What Gerry Griffin wanted to do, as the way he put it, was he was going to be more outside and he wanted vice-presidents inside. So he set up three directors of—there was a Director of Center Support, which was me, and under me was the Administration Directorate, the Center Operations Directorate, and the White Sands Test Facility in New Mexico. Then you had the Director of Research and Engineering, which at the time was Aaron Cohen, who became the Center Director after Gerry, but Aaron had the Engineering Directorate and the Sciences Directorate. Then you had a Director of Mission Ops [Operations], which was Cliff [Clifford] Charlesworth, and Cliff had Mission Control Center, flight ops, fly crew ops, and that kind of stuff. So those three had everybody reporting up through there then to Gerry. He was really good at dealing with the

Congressional people and the outside world. He was also great internally, but that's the way he wanted to operate, so he reorganized the Center to that way, and my job was just oversight of a whole bigger bunch.

Fortunately, I had good Center Directors or directors with those. My deputy, [R.] Wayne Young, took over the Administration Directorate. Ken [Kenneth B.] Gilbreath had Center Ops [Operations]. At that time Rob [R.] Tillett was head of White Sands, New Mexico. Those guys were all very good professional, know how to run directorate, people.

JOHNSON: Does anything stand out in your mind as far as major accomplishments or anything?

KELLY: Well, gee, obviously, yes, I think we did fine. I don't know that there was anything spectacular came just because of that reorganization. The three areas themselves were, in my opinion, well run already. I imagine every one of those guys got presidential citations. That's my guess. I don't remember specifically. But it was more of a way for Gerry to be able to offload his oversight level and let him raise it, than anything else.

So like I say, I personally enjoyed that time, but I'll say it this way, it put me one step removed again, also. When you're division chief, that's, to me, where the rubber hits the road at the division level. You're still working as well as managing. Once you get above that, you're now directing, and so the higher you go, the less you know. [Laughs] I hate to say that, but you only know what somebody tells you instead of being day to day in there. So it's a little bit of a scary feeling. You get a little bit of what the Center Directors—what does he know except what people bring to him. He has staff meetings and all that is supposed to come in, but it is still sit back and wonder "Do I know everything yet? I know less than I think I used to know about a

small area, because it's a bigger area."

So from that point of view, it's a little more nervousness on your part as to whether everything is getting done. But I did have some really super good folks, so it must have gotten done good, I guess.

JOHNSON: Did you enjoy doing that—

KELLY: Oh, absolutely.

JOHNSON: —being removed, other than being a little scary?

KELLY: Well, I'd rather personally have been a little more deeply involved. You actually could go do that, but that would be the wrong thing to do. You've got people to do that. You don't go jump in. You just hope, make sure that they're doing it. But, yes, I'd have been just as happier deeper in, but I enjoyed the job. I enjoyed every job I ever had. I've never had a job in the space business I didn't find really exciting to do. Some more riskier than others, I guess, but you know less.

JOHNSON: As long as you have good people underneath you.

KELLY: Oh, absolutely. Those three guys were terrific. They were not only good people, they were very good friends, except Rob Tillett. I had not known Rob Tillett very well. I mean, I'd been to White Sands once or twice maybe just because the senior staff would go out there just to

visit. But it turns out when you go to New Mexico, you find out that the director of the White Sands facility out there is God in New Mexico. He's on the governor's staff and everything. That's a big thing for the state of New Mexico, even though it's a very small NASA entity. I don't think we had probably fifty civil servants maybe out there and then several hundred contractors, but it's still a very coveted position in terms of state politicians wanting to know. Rob did a marvelous job out there, he really did.

So it was fun to go out there. I used to tell Tillett, because he would say, "Hey you ought to come out here more often."

I said, "Rob, you don't want us out there more often." I said, "That's crazy." I said, "I tell you what, we'll come out there at least twice a year, but I don't expect to have to come running out there and taking up your time as long as you guys are getting these jobs done. That would be silly."

JOHNSON: You didn't want to blow his cover, either, really. [Laughter]

Do you remember any major struggles during this time or anything that was a difficult challenge for you while you were in that position?

KELLY: Oh, wow. Let's see. No, not in the sense that it was a problem area, no. We were in pretty good times in the mid-eighties. That was, what, [19]'83 to '86, I think. You were just trying to get over the—well, no, you did have Challenger in there, in fact. Challenger came in '86. Gerry had just left, Gerry Griffin. Let's see, Gerry, I think, left in December, and then January you had Challenger.

Yes, that was traumatic, very, very traumatic. I was all the way across town in a meeting

of the Federal Executive Board, the Houston Federal Executive Board, when the Challenger happened, so I wasn't even watching TV or anything. I got a phone call from my secretary that said, "There's been an accident. Return to the base." That was really a sad time.

Again, they had the inquiry here. They set up this parallel board on the other side, which again I chaired. They said, "You've had the experience. You're going to do it again." You're a support staff, if you need anything bought or if need anything typed or if you need anything—whatever you needed as an investigating arm over here, then we're the support group over here. So I got two of those in my career. Don't want any more, hope that NASA doesn't have any more.

JOHNSON: Hopefully not.

KELLY: But, yes, that was a sad time. Then you even had the President [Ronald Reagan] come down here for the memorial service. That was nice for him to come, it was really great, but I tell you, it was a sad, sad time. But you hitched up your britches and you moved on, and you made it work.

JOHNSON: The aftermath after the Challenger with no flights for a couple years, how did that affect the Center and your position?

KELLY: Well, I think it was kind of like Apollo when you had the fire. You don't quit. You buckle down and do twice as good, if you can. I mean, you've got to prove to the world that that was a fluke, I mean, that we're still the best and we're going to pull it off. So that's all I remember, is everybody saying, "Well, if we've got to work six days a week again, let's go." I

mean, it wasn't a matter of sitting back and feeling sorry for yourself or anything like that and recriminations. They come to start with and then die off, and then you get back on with the job.

I guess a lot of people got affected by that and probably job-wise, no question, a lot of the managers. But, in fact, it caused—the Associate Administrator for Manned Flight at that time was Jess [Jesse W.] Moore, and Jess had been named the Center Director to replace Jerry Griffin, and he did come down, I don't remember exactly how long after the accident. But the powers-to-be then let him go. I don't obviously know what they said to him or how it all happened, but I know he didn't last but about three months, and he then left. He went with Ball Brothers [Ball Aerospace and Technologies Corporation, Boulder] up in Colorado.

I've always thought that was not a very good move on NASA's part to name him, to move him down here, and then remove him. I mean, if they were going to do that, they should have just never brought him down here. Because Jess Moore was a very, very fine man. But he was at the top of the pyramid for Manned Flight, and it cost him his job.

So there was an interim between Gerry Griffin. There was him, and then he left, and then the deputy was Bob [Robert C.] Goetz at the time, became Acting Center Director until Aaron Cohen was named as the Center Director. I don't believe that was until about September.

You've probably got that in your records somewhere, when he took the—1986, I think Aaron took over in about September of 1986, sometime in that time frame, at which time Aaron called me and Cliff Charlesworth in and said, "Hey, guys, should we keep the same structure?" Me and Aaron and Cliff were the three, quote, vice-presidents. Cliff and I both unanimously said, "No." We said, "You just don't need anybody between you and directors. If you do it, we'll do the best job we can for you. We think with Gerry, Gerry had a reason for being Mr. "Outside." I don't think Aaron had any desire to be more outsider rather than insider, so I don't think he needed

them. But if he thought we thought it would be best, I think he would have kept it, because it was kind of interesting because here I don't think he thought it was best, Cliff nor I did.

I don't remember—Cliff, I think, went on his staff, and I just went back and took over the Administration Directorate. But at the time, we combined it with the comptroller, consolidated the comptroller in there, which later got deconsolidated again. So I went back as the director.

JOHNSON: As a director, what were some of your responsibilities?

KELLY: Well, they were the same as I had when I was a director before. It was the same job, except we included the comptroller function within it.

JOHNSON: So everything else was the same?

KELLY: Yes. I had—Wayne was again my deputy, Wayne Young. The nice thing about Wayne Young is you never, never, never worried. He had the same authority I did, and I told him that, because the guy has tremendous judgment, just a very, very solid individual. In fact, Aaron Cohen used Wayne frequently. When like he'd go to a special assignment, he would want Wayne to participate with him, even once when he was acting as Deputy Administrator, which I'll bring up a little anecdote about that, if I can.

JOHNSON: Sure.

KELLY: James [A.] Michener, you may know, when he was writing the book *Space*, stayed at

JSC. Chris gave him space here and let him do his thing. He thought so much of the Center, that he donated money for a scholarship for NASA employee kids. It's called a NASA scholarship, but his stipulation was it had to be managed by the Johnson Space Center, even though it was for the entire NASA family. To do that, we set up a corporation or an entity that is incorporated with a board of directors of nine people, five of which and its chairman had to be from the Johnson Space Center, so that's the way we satisfied the requirement that it was being managed by the Johnson Space Center, and I was that chairman.

There's several little stories about Mr. Michener. One, after we had had, I don't know, I think it was like probably eighteen or twenty kids on scholarship from all over the country—I mean, JSC may have only had two or three of them, they could be going way up to MIT, Stanford [University, Stanford, California], and everything else. We thought it would be nice if we could get Mr. and Mrs. Michener to come for a luncheon, and we'd try to get as many of those kids as we could to come, if they could make it here. They'd pay their own way. We weren't going to bring them in. So we inquired, and he graciously accepted and said, yes, he would do that. So we let all the kids know on Saturday of a certain date we were going to have this luncheon, how many of you can make it? One hundred percent. Every kid and half of their parents, because they were invited, came down and we had that luncheon.

The funny little piece of that was, as my wife and I picked them up at the airport and as we were driving to the Center, Mrs. Michener asked me did we have a gift shop. I said yes we did, but that their time was very, very short. I mean, their airplane leaving back was really tight, but I said, "If we can carve out any time at all after lunch, we can go to the gift shop," at which Mr. Michener says, "Mr. Kelly, do you know the rules of the car?"

I said, "My goodness, no, I must not. Have you got a new one?"

He said, “Yes, sir. The rules are that if you have a gift shop and you don’t stop, I’ll give you ten dollars.” [Laughter] That was a most refreshing man, and he and his wife got together beautifully.

One other story, if you don’t mind, about Mr. Michener.

JOHNSON: Please.

KELLY: When Aaron was the Acting Deputy Administrator, he called me one day and he said, “We’re having a lot of problems with the Space Station.” We had a lot of people that did not want us to build a space station. There was some very important hearings coming up in the Senate, and it was we’d like to see if we can get Mr. Michener to testify. He’s done that before on behalf of the space program, and Aaron wanted to know, “See if you can pull that off,” and so on.

I called my contact at the University of Texas [Austin, Texas]. You don’t call James Michener; you call the contact. I told him what we were interested in. This guy’s name was John [A.] Kings, and John called me back and said, “Hey, it’s a little too important to move notes back and forth with Mr. Michener. Here’s his number. Why don’t you call him direct.”

So I called him and explained what we would like and when it was, and he said, well, he had a problem. He would like to do it, but that he just had some commitments and wasn’t going to be able to do that. I said, “Well,” the other option was, “would you submit a paper on our behalf?”

He said, yes, yes, he would do that.

I said, “Okay. We will take the liberty to take papers you have talked about in the past

and we'll have some of our writers put together a proposal for you, and we'll get it to you, and you can edit it or whatever you think." So he agreed to that, and we got started on that paper.

I got a call in another day or two from him direct, and he said, "I've thought about it, and I've just got to testify. But I've still got my problems, and you're going to have to solve my problems." He said, "The day before you want me to testify, I'm going to be in Wilmington, Delaware. I'm getting some award up in Wilmington, Delaware. And the day you want me to testify, I am supposed to be at a dinner in Austin that night. So if you can solve that problem, I will testify."

So I called Aaron and I laid it on him. Aaron said, "You done your job. Let's see if I can do mine." Well, sure enough, we got transportation and met him in Wilmington and brought him to Washington, and we also had transportation that got him back to Austin when he needed to be in Austin. So that was kind of nice.

Now, I told Aaron, I said, "It's done now."

He said, "No, it's not done, because you're going to be up here, and you're going to meet him at the airport, and you're going to stay with him," which I did. It was very, very delightful.

It was kind of interesting, we had a Filipino driver for us because we wanted a car on standby at any minute. If he wanted something, we were going to take him somewhere. It was a Filipino driver. Man, he found that out, he got in the front seat, and he and that guy talked the whole time that they were riding in cars. He just loved it, because he'd written *South Pacific*, he'd done all that stuff. So he was a very, very interesting, interesting person.

JOHNSON: Did his testimony make a big difference?

KELLY: Well, we hope it did. He sure testified. No one argued with him. I mean, they respected him greatly. It couldn't do anything but help. I mean, there are people that are not persuaded on anything, but at least respect was there, and so it was a positive thing. I have a copy of the paper he signed for me. I'm proud of that.

JOHNSON: That's an interesting little perk.

KELLY: A little sideline. Yes. Yes, being chairman of that scholarship committee was a perk. Another duty as assigned, to be honest, because it was meetings you had to go and selection processes you had to go through to pick the candidates. But it was really, really great.

JOHNSON: How long did you serve on that?

KELLY: Until I retired, so, gosh, I'd have to go back and find out when it started. Many, many years.

JOHNSON: A lot of kids got education because of that.

KELLY: A lot of kids. A lot of kids. In fact, he gave us more money at the luncheon to add to it.

Let's see, one of the professional associations here—and my memory is not that good right now, but one of the professional groups around here donated money also to the scholarship fund and set up a scholarship in the name of James Webb. Mr. Webb was probably the most well-known administrator of NASA back in the early days, not an engineer, but a good, good

man. To do that, number one, we called James Michener and wanted to know would that be okay, because he set up the fund and we didn't want to do anything that would make him uptight. He said, "If you can get more money, take it."

We called Mrs. Webb. I called Mrs. Webb and said, "This is what we're being asked to do," and we'd be happy to do it if she has no objections, and obviously she had no objections.

Later on with that same scholarship fund, the Freedom Foundation was going to give—wanted to give \$250,000 to the Hubble [Space Telescope] astronauts, the astronauts that went up and put the Hubble up there. Well, they can't take that kind of money, and so the Headquarters lawyers told them to get in contact with me at Houston because I headed up the scholarship fund and it was possible we could work out something with that scholarship fund in the astronauts' names.

So the spokesman for the Freedom Forum was—guess who—Alan [B.] Shepard, [Jr.], and so Alan called me up. He said, "Hey, Bill," he says, "tell me about it." So I explained it to him. He said, "Well, what we had in mind was ten \$25,000 scholarships.

I said, "Well, we can change our bylaws and pull that off, because obviously we don't give those kinds of scholarship funds. We give \$6,000 scholarships. But I would think that it would be better, to tell you the truth, if you just did like one of those and then put the rest of it in escrow in the scholarship fund and have a scholarship every year forever in y'all's names, I mean perpetual."

He listened to that, and he thought about that, and he said, "I like that better."

I said, "Okay." I said, "What do we have to do to pull it off?"

He said, "On our side, all I got to do is say yes."

I said, "On our side, all I got to do is do say yes, so it's done," and that's what we did. So

the 250,000 bucks was given to the fund.

Now, obviously, again before we made anything permanent, I called Mr. Michener and told him what was happening and would it be okay, and same response, “If you can get that money, go get it.” Never, never somebody’s feeling “I’m overshadowed,” or something like that.

So that was kind fun times, being with that scholarship, those little asides, the little other duties as assigned that really add to your life.

JOHNSON: Make it more enjoyable.

KELLY: Oh, yes. Both Mr. and Mrs. Michener were very refreshing. A lot of people don’t know Mrs. Michener was in a Japanese internment camp, our internment camp, in [19]’41 when they took the Japanese from the West Coast and put them in these—I call them internment camps. I’m not sure what they officially were. But she was put in one. She was Japanese-American. A sad time in her life, I’m sure.

JOHNSON: I can imagine.

Around 1986, I believe you became Chairman of the Board of the Manned Space Flight Education Foundation?

KELLY: Yes. Have y’all talked to Hal Stall?

JOHNSON: I don’t think so.

KELLY: If you haven't, you really need to talk to Hal Stall. This is Hal's Stall's idea. Hal Stall was the Director of Public Affairs, and Hal had a dream that the Johnson Space Center had everything in the world to offer in space, but we didn't have a museum or a visitors' center or nothing. All's we had was back of an auditorium over here with a few exhibits sitting in it. The government never spent any money on it, and the government wasn't going to spend any money on it. It was pretty obvious.

So he wanted to know if would it be feasible to use private funds to build something, and so he got that idea and got a little feasibility study done free, essentially free, that said, yes, you could actually build something and it would pay for itself. So at that point the lawyers got involved, and we formed the Manned Space Flight Education Foundation, Incorporated, affectionately known as "Ms. FEFI". The founding directors were me and Carolyn [L.] Huntoon and Harvey [L.] Hartman. Carolyn was—I can't remember whether she was Associate Director at that time or whether she was just heading up the Science Directorate, and Harvey was Deputy Personnel Officer. Hal Stall was president, and Chuck [Charles A.] Biggs was his vice president. He was also in public affairs.

So we got that in place, went and elected three more NASA people, because it was an eleven-man board, six NASA, JSC, and five from the public at large, with the chairman having to be from Johnson Space Center. But it was Hal's dream to do that, and so we put the board together, including civilians, and we went after civilians that knew the civilian world instead of the government world, because we knew the government world.

The first civilian I wanted was Chris Kraft, just because his stature is immeasurable. We needed him. Then we went and got—what we were looking for was people who could guide us

and help us through the civilian world. So we called Gerry Griffin. Gerry Griffin, at that time, when he had left JSC, he went as the president of the Chamber of Commerce, Houston Chamber of Commerce. I called Gerry and I told him, I said, I worked on a project for the Chamber once before with John Walsh. John Walsh was president of Friendswood Development Company, which developed Clear Lake and a few other kinds of places, which is a subsidiary of Exxon, so he's also a vice-president of the Exxon Corporation. I said, "Really we'd like to have that kind of caliber individual on our board. I mean, he would know other civilians to bring in, and he would know who and how to steer through the commercial market."

Gerry said, "Well, I'll tell you what. We'll have a Chamber meeting and I'll have you and Hal up here, and you all can give a presentation to the Chamber board, and I will ask John to stay afterwards, and y'all can have a chat with him."

So we did that. John listened, and John's reaction was, "Gee, that sounds great," but he says, "I'm already on probably a hundred boards. I haven't got any time for any more boards. It's just really not a good time." But he said, "Let me think about it a day, and I'll let you know."

Next day he called me and, he said, "I just can't talk myself out of it." [Laughs] So John came aboard, and with him he got the other key guy that I felt was the key guy, was a guy named Joe [M.] Bailey. For the life of me, I would have to ask Joe to go through all the banks, because I can't remember which is which, but he was chairman of the board of a bank which merged with another bank and all that jazz, but at any rate, Joe was always at the top, no matter how it ended up. He was invaluable. In fact, he became chairman of our board once removed from me. When I retired, John O'Neil took it, and when John retired, Joe Bailey took it. Joe is no longer on the board. He's no longer active in banking, but his asset of being on that board, he and John

Walsh were immeasurable.

So that's how we put the board together. That's how we were able to know what to do instead of just using the government, because we sold bonds. Back off a sec. We were trying to use bank funds, borrow bank funds, to build the project, and banks backed out on us—Citicorp. So we hired financial advisors, Masterson, Mooreland and somebody. They recommended we sell junk bonds, that's what they in essence were, tax-exempt securities.

Well, the federal government does not have the authority to do that. Tax-exempt securities are hospitals and cities and states and stuff like that. We as a foundation were a nonprofit foundation based on our association with NASA. I mean, that was the rationale, 501(c) something. To be able to do the other, we needed to change and become a public charity. The way to do that, according to our lawyers, was going to be pretty simple, but it took two major things. Number one, the easiest thing to do was to expand the board to thirteen members. Both new members would have to be from the public at large. That gave the public at large a seven-to-six advantage on the board. And the chairman could no longer be required to be a NASA employee. With that, you could qualify to become a public charity and be able to use those kinds of bonds.

Now, that takes getting through some IRS hoops, too. You have to have some approvals from the IRS to do lots of this kind of stuff. So we put all the papers together and submitted them to the Internal Revenue Service and summarily got turned down. Just that quick, just like that.

So at the time I was still very active in the Houston Federal Executive Board. I represented the Johnson Space Center on that board, and another member of that board was named Arturo Jacobs. If any of you have been around a while, Arturo was the District Director

of the Internal Revenue Service here, a very, very fine person. I called Arturo, and I said, “Hey, I got a problem,” and I explained it all it to him.

He said, “Hey, okay.” Everything has to be in Dallas [Texas], by the way. Approval has to come out of Dallas, not Houston. I don’t remember the head of the man in Dallas, but anyway, Arturo said, “Oh, I know so-and-so. He used to be my deputy.” He said, “What would you like? Do you want to get a meeting with him?”

I said, “Yes. A letter is not going to get you anywhere. We’ve got to sit down and understand what’s wrong or something.”

So Arturo facilitated a meeting for us, and we went to Dallas, me and the lawyers and Hal Stall. We sat down with them and explained what we was trying to do and, they said, “Oh, that’s easy,” and they came with some forms, said, “Get these things all filled out and get this thing done, get them back, and you should be okay.” In a week, we had it finished. It was done. I was a little disappointed in our lawyers that didn’t know what to do when we went the first time, but without Arturo, you’d have probably been writing letters back and forth for years and never pulled it off. But that worked out pretty good. That’s how we changed over to be able to go out and be a public charity.

Then Harris County already had in place a—I’m not sure what you’d call it. It’s an educational entity. It’s just on paper, which authorizes [the use of] tax-exempt bonds. What they do is they issue them in your name, and then they have no more legal responsibility. They have no obligation whatsoever on the taxpayer of Harris County. It becomes the entity that used it, which is us, and we would qualify as educational, so that’s how we issued tax-exempt securities, sold them all in one morning, sixty-something million dollars’ worth, something like that. So it was pretty good thing to do. I mean, it’s the way we did fund it.

Now, you probably also know that it was designed by Walt Disney Imagineering.

JOHNSON: Right, and I want to talk about that, but we need to stop for just a minute and change the tape out and take a little break.

KELLY: [To step back—Houston had a Federal Business Association in the 1970s (a Federal social group. Special conferences were being held around the country to talk on energy.) The Federal Business Association was asked to coordinate all that good stuff [in Houston], and we did. OMB [Office of Management and Budget] was so pleased, they got us named the last Federal Executive Board. Members of the Federal Executive Board are the heads of the agencies here. They don't have a choice. They are the member. They may designate an alternate to represent them on those boards, which Chris Kraft did, Aaron Cohen did, everybody did, and it was me. I chaired that board a couple of times.

The one thing that it really paid off doing was with Arturo [Jacobs] helping Space Center Houston, and I had already mentioned I was sitting in a board meeting when Challenger happened. But it was a good thing to be part of, because you knew in the federal family where to go if you had problems and they knew you, and so it worked. It worked well.

JOHNSON: You mentioned Space Center Houston when you first started talking about finding funds, that the banks pulled out.

KELLY: We had a letter from Citicorp that obligated itself, in my opinion, to fund us, and they withdrew. Then we thought we'd get Mitsubishi [Bank of Tokyo-Mitsubishi, Ltd.], but

Mitsubishi thought about it and then said no.

JOHNSON: Did they give reasons?

KELLY: Not necessarily, no. We were a nonentity. Nobody had ever heard of us. It would be junk bonds. In that case it would just be a mortgage. So we were forced to go with bonds as the try of last resort. There's several stories about this thing. Are we taping now?

JOHNSON: We're taping. Go ahead.

KELLY: There's several stories. Number one, we did want Walt Disney Imagineering. I mean, it was something you'd like because, number one, they know how to entertain people, they know how to educate people, they know how to move people, better than anybody in the world. I mean, that's what they do, and that's what we needed. But Walt Disney doesn't do work for other people. They did the Autry Museum [of Western Heritage, Los Angeles], I think, in California. It got in trouble, just to bail them out kind of thing. But that's not their job. The division of Walt Disney, which is Walt Disney Imagineering, is in the business of designing theme park and theme park rides for Walt Disney, and they've got all they can run and jump over.

I hope you'll talk to Hal, because he may tell you how, but, I mean, Hal got us an audience. Hal used to live out in California before he came to JSC. He'd been a police officer, in fact, out in Orange County.

But we went out and we met with Walt Disney's people and Walt Disney Imagineering

and had some nice, nice meetings with them, and finally they ended up saying, “Yes, we’d kind of like to do that.”

We really hit well. NASA prides itself in its image. Well, Walt Disney prides itself in its image. We prided ourselves in attention to detail. So do they. Our difference is only in product. They’re just as worried and concerned with their product being perfect and right and that their image being perfect and right as we are, so it was a really, really good match. When they said yes, we were happy. Now, they weren’t cheap. They are expensive. But they did design the facility and the exhibitry. Originally we had talked about them also building it.

Prior to starting construction or getting on out there, Marty Sklar, who was the president of Walt Disney Imagineering—let’s see, let me go back. Vance Ablott, who was the project manager on the project for Walt Disney, decided that he would like to stay with the project and be the general manager and then come on the payroll of Manned Flight Space Flight Education Foundation. Well, Hal’s and my reaction to that was there’s no way in this world we’re ever going to steal somebody from Walt Disney Imagineering. We’re not ever going to get those guys mad at us, if we can help it. But he said he’d already talked to Sklar, Marty, and so we called him.

Marty said, “Yes, yes, he has talked to us, and I think it’s probably a good move for him in his career, and you will have broken nothing with us if you want to pull that off. In fact,” he said, “I think you will be getting the right guy for the job,” and so he was perfectly happy with that.

I said, “Well, gee, that’s good. I don’t think we will have any problem with it at all with one exception.” You have to go back a little bit again. When he finished that, he also said, “I think now if you take him, you really don’t need to pay Walt Disney to build that building.

You've got a project manager who can do that, and you'll save the cost of Walt Disney Imagineering, because we're not cheap. You can use our subs," which is what we would do, who were their two major subs that designed the facility and designed the exhibitry.

I said, "Gee, that sounds all well and good, except I don't want to lose the connection with Disney. I mean, to me it's a good connection, and I'd like to keep it."

He said, "Well, how do you propose we do that?"

I said, "I propose you join my board of directors," and he agreed. So Walt Disney's president, Imagineering's president, Marty Sklar, became a member of our board. Now, he couldn't attend very many meetings, but every meeting he did not attend, he attended by phone. Believe it or not, they set up a conference call in his office, and he was there. He'd come in. He'd do his other business, but he would [be there].

So it really, really was a good experience and a good marriage, in my opinion, at least good for us, and I think Mr. Sklar enjoyed it also. So that was really helpful, pulling that sucker off.

And we did sell those bonds. There's a few stories about that, because we all went to— we had some meetings set up by the folks, our bonding folks, in New York [New York] and in Boston [Massachusetts]. They told us, "Now, listen. Now, look. We've got a luncheon set up in New York. You've got time to make your presentation, so you need to be pretty crisp and pretty short, get the lunch, because those folks are going to listen to you, eat, and leave. They're going to get out of there."

So we decided, okay, Hal and I'd go. We would take the guy, Buzz [Harrison] Price, who was the guy that was doing all the projections, how many people would attend and that kind of stuff. He'd done everything for Disney and Disney had recommended him, so we hired him. We'd

take him with us. We'd take a board member Charles [F.] Bolden [Jr.]. Colonel Bolden was an astronaut, but he was on the board. We would take P. [Paul] J. Weitz. At the time P. J. was the deputy director of the Center, but he had been on the board of directors until he became the deputy director, which became a conflict of interest. Now, I mean, you've got to move off because there's a contract between Space Center Houston and the Center. P.J. also was an astronaut. He was a Skylab astronaut. So we took these two astronauts with us, too.

Away we go. Well, we can't get rid of them folks. We can't get them to leave. I mean, man, we're going and going, and we finally had to tell them, "Hey folks. We've got a plane to catch to Boston. We've got to get out of here."

So the same thing happened to us in Boston. We got back home and the finance folks say, "Gosh, we got to find out what's going on, because we obviously missed that guess." Well, it turns out those people were just so struck with a space venture. All they ever hear is hospitals, rest homes, whatever else these tax-exempt securities are for, but nothing as exotic as astronauts and space business. Like I say, we sold all them bonds in one morning, and that's how we built this facility.

Now, we did get some money from the federal government. We have two things—I guess three things from federal government. Number one, we have a license. I say "we" because I still feel a party of it, although by law I cannot be. We have a land use license for the land. I believe it's 103 acres. I think some of it's already got a school on it, so it's probably been a little changed since I left, but 103 acres. We can use the land for fifty years at no cost, so it's a license to use the land as opposed to a lease, which could cost money and things like that. And the government agreed to provide artifacts—well, the exhibit over there.

In turn, Space Center Houston had to be the official Visitors' Center for the Johnson

Space Center. The Center Director gets, I think it was a thousand passes a year, but he can have anything he wants, doesn't make any difference. He can bring guests over there. NASA employees go free, in fact. They don't have to pay to get in. So it really worked out really great getting all that stuff put together with the government and NASA.

Another little story. When we were in Boston, Mr. Price got out of the cab on the street side, and the door was open. When he paid the bill, he walked away, and a car came and hit that door, and busted it and knocked it off. Price just kept right on going into the building. What the cab driver did, I don't know. He don't either. [Laughs]

JOHNSON: Oh, no.

KELLY: It's funny now, but I'm sure that cab driver was irate. He probably just picked it up, put it in the back seat, and moved on.

But that was kind of fun times, it was, and it worked. It worked well. We ended up having Vance here. Vance had left to take over the Challenger Center in Washington, D.C., after I retired. Then they hired Richard [E.] Allen, [Jr.], who is the current manager.

I think I was talking about money from the government. Hal and I and Hank Flagg [phonetic], who was a lawyer, went up and talked to a bunch of the staffs in the Senate and the House. We had Senator [Lloyd] Benson and Senator [Phil] Graham and Senator [Jake] Garn were all behind us, every one. So we talked to their staffs, and Jack Brooks really, really paved the way for us, because that was the key, to go to the subcommittee to the one that Jack Brooks was on the committee. For the life of me I can't remember names of committees or any of that stuff anymore.

We went and we proposed some funding that JSC would be able to, or would be willing to put forward a guarantee of five million a year or something like that if they had shortfalls only and things like that, and obviously they didn't like that at all. The staff proposed in the long run that they would go and get us \$10 million, one time, never come back. It could not be used for brick and mortar. It would have to be used for roads and ditches and exhibitry. We accepted that, and so we did have the \$10 million government donation. A lot of people think it's all government, and that's the only government donation is that ten million, plus the use of the land, and the artifacts belong to the government. In fact, the artifacts belong to the Smithsonian [Institution, Washington, D.C.]. They do not belong to the Johnson Space Center; they belong to the Smithsonian.

But the facility was built with private capital, and it's being paid back because of the flow of funds coming into the Center. So we pulled it off. It took a while. We didn't open until [19]92. It took six years to pull it off. Had a big fundraising drive. John Walsh by the way, headed that up, he and Joe Bailey. I'm here to say in this sad times that the first major donation, which was 300,000 bucks, which is a biggie, was from Ken [Kenneth L.] Lay of Enron, the first people to step up to the plate.

In the long run, I think we raised a little over \$5 million in donations from companies and individuals, so that you had some show of public support for the thing.

I think Richard is doing a marvelous job over there right now. I still take my grandkids over there.

JOHNSON: Do you visit?

KELLY: Yes. I've got eight grandkids. We go over there. Yes.

JOHNSON: Have they seen the one that's there now?

KELLY: Which one?

JOHNSON: Grossology?

KELLY: No, they haven't. I haven't taken them there. Let's see, I guess probably Christmastime or in the Christmas season we took some of them over there, but haven't been there since then.

JOHNSON: They'll like this one.

KELLY: Yes. Well, I tell you the one they really like is the one where they scale walls and all that jazz. They liked the auto thing. The racing unit, did you see that?

JOHNSON: No.

KELLY: They had a racing team in there, and you could get in there, and they'd take volunteers, and they'd have to change the tires, blow the whistle, change the tires, put the tires back on there, and do that kind of thing. So they had a ball. They had magician shows. So Richard's really got it going good.

So that was probably the biggest other duty as assigned that I had. But again, if you

haven't talked to Hal, Hal lives in Fayetteville now, Fayetteville, Texas. I don't know, some of you ladies around here probably have seen realtor signs called Dorothy Stall. That's his wife, except she sold the company and it's now out of business, I think. But they moved to Fayetteville, Texas, where they have a gift shop, and he had a couple of bed and breakfasts. I don't know how many he's got left. He owns a warehouse where he refurnishes furniture, especially rocking chairs. Upstairs he has artists that rent the loft to use. He owns a tearoom. He owns the facility. He doesn't provide the food; someone else provides the food. She is also a realtor up there. It's a great little place. I haven't been up there in several years. I haven't seen him in several years. I need to get up there. Some of that might have changed. But that's the guy that had the idea. As most of us board members used to say, when Hal called, we were afraid to answer because he was going to give us another problem to go do. [Laughs]

JOHNSON: Well, it sounds like he still has ideas going.

KELLY: Oh, Hal was marvelous. It's obvious that you never met him, but the guy has the greatest speaking voice you've ever known. I mean, it just projects tremendously. He was the right guy at the right time, no question. Most of us were really pleased to have been party of it.

Right now I don't even know who the board members are. When I retired, they elected me as vice-president so I could stay involved, and Mr. Flagg, our lawyer, called me in and said, "You are prohibited by statute for appearing before any employee of the federal government on behalf of Space Center Houston with the intent to influence." Well, anytime you meet with somebody, you're trying to influence them in one form or another.

JOHNSON: Was that because you were an employee?

KELLY: Yes. There is a contract between Space Center Houston and the Johnson Space Center, and I'm a signatory on the Space Center Houston side. Aaron Cohen was a signatory on the other. It's called a memorandum of understanding, but it's still a legal contract. So statutes are meant for procurements. I mean, it obviously was never intended for something like this. There's nothing in it. There's no money. But it does prohibit you from doing that, and so I had to resign from that.

Now, I could go to work for them or I could volunteer for them, but I cannot, again, talk with government employees, try to influence them to do something for the place. But, see, if you were a vice-president, you'd be going to board members, and boards are having deliberations, and so you're trying to get your point of view across. You're trying to influence. Most likely, like Hank said, no one would ever care, but it is a legal problem, and if somebody did, you could get yourself in trouble. So in 1994 I severed my ties.

JOHNSON: Do you feel like Space Center Houston fulfilled all the objectives that [you] had for it at the beginning?

KELLY: Oh, absolutely. I think it did. Absolutely. Unfortunately, we didn't get the attendance Mr. Price said, and it gave us some major financial problems, which Richard has overcome, which is nice. But, yes. The only thing it has not done is expand as a center. I mean, it's changed venues by bringing touring road shows, I guess, in and out. The intent to begin with—and could still be if you could ever see your way to do it—would be to expand venues if you

needed to. There are knock-out ways. I mean, it's designed such that there are some of the places in there you just knock those walls out and expand into a new venue or something like that. But they haven't had to do that.

But as far as I know, I haven't seen attendance figures in years, but I'm going to guess he's still getting 800 to a million, somewhere in that neighborhood, less than a million people. The projection was two million, by the way, twice as much as we got.

JOHNSON: Why do you think the people didn't come the way it was projected?

KELLY: Well, what we got was about the same number of folks we were getting when we didn't have a Visitors' Center. They just now were paying. There is no way I know to know. It gives you mixed emotions. If you'd have knew it was a million, you wouldn't have built this. You'd have built something different. But since you thought it was two, you built this. I'm sure glad we got this. It did cause some hiccups in paying off the bond folks, and so I don't know what all Richard has done, but I know they went in and were able to restructure their debt problems such that they can operate, they can pay their bills, and they can have venues come in, because you've got to have some new stuff constantly to get the same people to keep coming back.

I still like the first movie, *To Be an Astronaut*. That is still my favorite movie. I hope y'all have seen it. You ladies would probably love it, I mean, with a little gal to begin with out there in the woods. But that movie, by the way, is not Imax. It's Iwerks, W-E-R-K-S. Mr. [Ub] Iwerks, I guess, in his day was the chief photographer for Walt Disney, and that company makes a large format camera and film. At the time we had some disagreements with Imax about prices, what they wanted it to cost, and so we went with Iwerks.

Subsequently Imax came back to us and said, “Hey, we’ve got to be in the facility,” and we agreed. They came down in price, and they had to pay for any changes that had to be made, because with those big camera systems, if you’re going to move them, you’ve got to have them on rails. The projection booth is as big as your house. If you all didn’t know that, just look back up there at that, it’s got two camera systems in there on rails so when you’re going to show one Iwerks, you move it so it’s on the centerline, and move it out and bring in the Imax, because neither one doesn’t want to be there.

I’m not sure I can remember the color schemes, but the theater has got two colors to the seats. The ends are one color, I mean, for several seats in, and what you do is, Imax you sit inside the outer color. If you sit out there, it’s okay, but you don’t see as well. It’s really too far. But Iwerks uses the whole theater. If you’ve got overflow crowd, everybody sits where they want to sit, but that’s what the seat coloring was all about, was to do that.

So that’s how we got Imax. They wanted to be in there pretty bad. I think they didn’t think we could put a camera system in there, but Iwerks works fine. *To Be an Astronaut* works fine. It’s just that that’s the only film in Iwerks there is, that I know in there. I don’t think they’ve had any more made. Whereas Imax is making films quite a bit. So you can pick them up when they—*Hail Columbia* and *Speed*. I mean, I see every one they got over there. They’re all good.

JOHNSON: I imagine that the lack of attendance after September 11th [2001] may have had an impact on them, too.

KELLY: I haven’t talked to Richard. I don’t know whether they have had a change in attendance

since then. I do really need to get over there.

JOHNSON: It may be picking up again. I think everything just kind of shut down. I mean not with them, the whole country.

KELLY: They're going to get a loss in September anyway, school starts, so they change their hours. They have very, very few kids in there during the day, except busloads of yellow buses come every day.

That's another change that happened, because Hal envisioned, and I wished it could have come off, and we started out this way, that kids in school buses were free. But it got to the point they weren't being able to pay bills, so we had to restructure debts that you had to start charging them admittance. They don't pay what the regular price, or I don't think they do. That could have changed, too, but we did have to start charging for the yellow buses. But they originally came in free, which is still a good thought if they could ever work it out, because schools have two or three things they do each year in terms of, quote, off-site projects, they go someplace, and that's one where most of them will go at least once.

JOHNSON: I know education is very important to the Center.

KELLY: Oh yes. They've spent a lot of money over there on stuff, I mean, that center as well as JSC.

JOHNSON: I know they had the educational conference just this weekend.

KELLY: Yes. And, you know, the tram tour. I don't know what—I haven't asked. I guess the tour is still going. I don't know whether it is or not.

JOHNSON: I think they've limited some of the areas they go to, but I've seen the tram still on-site.

KELLY: Because that would just be criminal if you couldn't do that. I mean, the terrorists win if you do that.

JOHNSON: That's right.

KELLY: Which is kind of interesting, all of that land work out there for Saturn [Street] was done by [Houston] Metro. That's their gift to that center. That's a whole bunch of street work done, I mean, the entrance to the center, the entrance to Space Center Houston, the whole Saturn overpass kind of thing. The reason it's that way is because the trams can't go up a grade. They have to stay level. So it had to have a hill for it to go through, and they had to build a hill. So they built the whole hill and road so that the tram could go under it, and all that was a donation from Metro. I mean, that's the thing they're supposed to do, make sure things move right, but there's no way that the feds were going to pay for any of that and Space Center Houston sure couldn't have done that, so we'd have had to do a whole bunch of different kind of things if they were going to have that looking like it does. It cost millions, so it was nice. Nice help.

JOHNSON: Definitely.

KELLY: We opened in '92, and we had paragliders and we had all kinds of stuff. Groundbreaking, we had Kathy Whitmire, Senator Benson, Senator Graham, Jack Brooks. I mean, man, we had—those folks really—I can't remember whether Senator Garn was there or not, but he also was a space nut. He flew in space, by the way, Senator Garn. He got to fly in space. I can remember one of the staffers on the Senate snidely remarking when we chatted with them saying, "Well, you'll have to have these senators support you."

I said, "Well, how about Mr. Benson, Graham, and Garn? Would you like them to give you a call?" [Laughs]

But that was our life for six years.

JOHNSON: Your other duties at the time included a lot of things.

KELLY: Yes. Yes. But that one was probably much much fun.

JOHNSON: You mentioned the college scholarship fund and, of course, Space Center Houston. Are there other of these extra duties that you remember that you want to share with us?

KELLY: Well, those are probably the two that took the time. The scholarship fund didn't take that much time. We only did that once a year. But the Space Center Houston took a lot of time. We had to have Headquarters behind us, because we were a lot of dealings with civilian forces. So, I mean, you had to go to lunches every now and then, which usually you pay your way.

There's no option. You have to pay your way when you're going to some of these things. So we had to get permission from NASA Headquarters to be able to do those kinds of things, but we did. I mean, they certainly understood that and pulled it off. There's nothing would ever compare to that with me. I mean, that thing was huge, and to start from scratch, you had no idea how you start.

JOHNSON: Or what you were doing?

KELLY: Yes. [Laughter] Knew what we'd like, but how do you get this done? The way you do it is go get the right folks.

That's another a little story. We wanted a guy named Walter Hall to be on the board, if Walter Hall means anything to you, but he was probably the biggest name around here, Hall Insurance and everything else. So we said something to Dr. Kraft, "It'd sure be nice to get him," and Chris said, "Well, talk to him. I'll set up a meeting for you, and you and Hal talk to him."

So we had a meeting set up, and we went to the Yacht Club. He took us down at the Yacht Club, and we laid all this on him, what we were planning to do and all that kind of stuff, we've got it all finished. He said, "Well, I'm not going to do that." He said, "I'll say one thing, though. I appreciate you guys coming and laying it on the line for me. You've got a friend," he said, "but I'm not going to be on the board." But we had a friend, and that's true, because he would talk us up and help. If somebody'd ask him about donating money, he'd tell them, "Donate it," so I mean, that's really appreciated.

Walter passed on here a few years back, but he was—I don't know, he was a very, very big man in this community in his presence. You know how some people, when you get in their

presence, you know you're in the presence of people that—I call them great people. I mean, they really are. There are not that many of them, but Chris Kraft, in my book, is one, Gerry Griffin. Walter Hall was. They're just people that are able to do things. They just do it.

JOHNSON: A good friend to have.

KELLY: Yes, he was.

JOHNSON: Well, you mentioned some of the people that you feel that are great people. Is there anybody else that—thinking back on your career that had a big influence on you?

KELLY: Phil Whitbeck had a big influence on my career. Phil was the Director of Administration. Phil is a funny kind of man. He was a—let me say he's a thinker. I always thought I was a doer and not much of a thinker, and we used to kid Phil and say, "You know, Phil, you come up with about a hundred ideas a month, and one of them every now and then is okay." [Laughs] But he was always wanting somebody to test his theories.

When he hired me as a division chief and I found out about that, all the other division chiefs would tell me, "Man, he's going to drive you nuts. You just have to fight that."

I got with my deputy, Parker Carroll, and I said, "You know what? We've got 102 folks in these divisions. We're going to set two man-years aside to do things he wants us to do. We're not going to argue with him," and so we always got along fine, because he'd want to test something, we'd go do it.

The SAG process, which I talked about, Senior Advisory Group process, of looking at the

Source Board, that's him. He thought that up. It's a great process. I think the rest of the agency follows that now. But, yes, I would attribute a lot to Phil Whitbeck.

I'll tell you a little anecdote on him. He had a retreat of all his division chiefs down in Galveston [Texas]. He said, "When we get down there, I want each of you division chiefs to give a presentation, but I don't want you talking about promotions. That's off base."

I said, "Well, what can you talk about?"

He said, "Well, you can talk about how you're doing, and morale. You can talk about lots of things."

I said, "Okay." So it came to be my turn to talk, and I got up and I said, "I got a morale problem in my division. We can't get promoted." I thought he was going to go ballistic. [Laughs] I told him, I said, "Hey, I've got twelve GS-11s that all meet every guideline of the Center," and at the time the Center had ranking guidelines. You'd have to rank your employees, one through 300 or whatever they were. Then based on ranking and it would depend on numbers of months, would meet the ranks and also with points. Back then there was a point system. Each grade-level increases a point, and since points are money, I mean, you've got to pay salaries, you can only promote so much.

But I had eleven guys that, as far as I was concerned, met every guideline, and I wasn't getting any promotions, and I played this out for him. At that time personnel was under Phil. It was later taken away, but at that time Jack [R.] Lister of the personnel office worked direct for Phil. Jack said, "It's not true. It's wrong. Not true."

So the weekend went past. As soon as we got back to base, he had me and Jack Lister in his office and gave Jack Lister the list of people.

The next day, Jack Lister came back with me and Mr. Whitbeck and said, "Bill's right.

I'm wrong."

So Phil marched upstairs to General Bogart, who was the Associate Director, laid that on General Bogart. Phil said, "I'm wrong. Jack's wrong. Bill's right." Bogart said he'd give me ten of the eleven, but he didn't want to do one of them because he was in the lower 50 percent.

I said, my answer to that was, "He meets the guidelines, and I'd like to get him promoted, because I think it's a specific problem that will motivate, and if you'd let me do it, I'll pick one of the others and not promote."

General Bogart said, "If you feel that strong about it, you got eleven." So we got them all promoted. It takes a big man like Whitbeck, in my opinion, to say "Hey, I was wrong. I thought I was right," obviously, and Lister thought he was right, because obviously one of his employees had said, "Hey, here it is," because that's an awful big number to be missed.

So anyway, I always felt Phil was a very fair and very good man. So I enjoyed that. He was a giant. In fact, when Chris called me in and told me that Phil was retiring and that he was going to put me as the Director of Administration, his statement to me was, "Bill, Phil Whitbeck never gave me bad advice, ever," and he'd worked for Chris as long as Chris was the director, which is ten years. I think Chris took over in [19] '72 and retired in '82, ten years. It's a nice, nice compliment.

JOHNSON: That is quite a compliment.

You worked under several different Center Directors.

KELLY: Well, yes. [Dr. Robert R.] Gilruth. Kraft.

JOHNSON: Any you enjoyed more than others?

KELLY: Well, gosh, I never worked direct for Bob Gilruth, because I was not on the senior staff until Dr. Kraft became the Center Director, but I knew Dr. Gilruth. In fact, making one presentation once in budget sessions, why, we'd made some comment about we had this new stuff from Headquarters, which, in essence, carried all the overhead people in the Center in the category. Bob latched onto that and said, "Let's fight it."

I said, "Well, you can go fight it, but remember now you're overhead. You've got to watch out for who you going to fight some things." So I knew him less. I was directly on Dr. Kraft's staff for nine years as management assistant and then report directly to him as a director, Director of Administration.

Then when Gerry came in, he had a different organization, but me dealing directly with him. Then Aaron had been a friend and colleague for, gosh, twenty-five years, I mean, and all the respect in the world for Aaron. So, JSC has had a tremendous group of people as leaders, just tremendous.

JOHNSON: Very fortunate.

KELLY: Yes.

JOHNSON: You had some other involvements in some other awards throughout your career. You received the NASA Exceptional Service Medal in 1973. Can you tell us about that or what you received that for?

KELLY: Well, it's doing your job. I mean, fortunately. I think Chris liked what I was doing, I guess, and put me in for it. I think I have two of those or two leadership medals, one or the other.

JOHNSON: You also have the Equal Employment Opportunity Medal.

KELLY: Well, and that's more for the fact that we as a Center with an EEO program or the minority business programs under me and we met goals. I don't know that we've always met our goals, and we prided ourselves in those kinds of things, said, "Hey, this is the way we do business." So that's why you get that.

I got a presidential citation that Gerry Griffin put me in for, which was very surprising, because admin folks weren't getting those very often. NASA is an engineering outfit, and the technical side usually gets most of the awards, but Gerry Griffin fought to get me a presidential citation, and he did, and I was very flattered.

It was kind of interesting because the award was given to us at a banquet at the Cape [Cape Canaveral, Florida] when Dick [Richard H.] Truly was the Administrator. Dick Truly, by the way, is another great Georgia Tech man, as is John [W.] Young. I mean, we have a few astronauts. But it was the night of [Operation] Desert Storm starting, and right in the middle of that banquet, somebody came in and gave Dick the news, and the banquet died. We all ran to find a TV.

At any rate, I'm very proud of Mr. Truly, or Admiral Truly, as he was. Now we've got another astronaut doing good. I guess Charlie will get it, Charlie Bolden will get it. In fact, Dick

Truly was the—let me say it this way, he was the first Bubba. When I was on Chris' staff in the early seventies, we had another guy up there named Pete [Henry E.] Clements, came in from Headquarters. Pete was a retired air force colonel, but he was just a tremendous guy. Chris decided at that time to bring up on his staff on a temporary basis promising mid-level managers that were probably going to be top leaders some day at the Johnson Space Center. I can't remember whether he was Bubba One or Bubba Two, but Dick Truly was either, and that's what Pete Clements dubbed them, Bubbas, Bubba One and Bubba Two. So he was on the staff.

Well, they picked out some pretty good talent. He ended up being the NASA Administrator. The other one, the other either One or Two, and I just can't remember which came first, was a guy named Jay [F.] Honeycutt. I don't know if y'all have talked to Jay Honeycutt or not, but Jay ended up as president of Lockheed [Martin Corporation]. He was also Center Director at Kennedy. So those are two guys, the first two people that Chris selected to be the promising managers of the future. I mean, that's an eye for talent right there.

JOHNSON: Very true. Some of your other assignments, I believe you were part of the suggestion system, implementing the JSC suggestion system.

KELLY: Yes. I chaired the Suggestion Committee, which reviewed Center suggestions, sent them out for comment to places of expertise. Obviously we weren't the experts. We were supposedly a reasoned group of people that would make decisions based on facts. I chaired that for, gosh, a number of years, I guess. It was kind of nice to see people get rewarded for coming up with ideas that are good ideas. So from that point of view, even though it was kind of another duty, it was something you needed to do and fun.

JOHNSON: What type of suggestions?

KELLY: Oh, anything.

JOHNSON: Can you remember any that stand out in your mind?

KELLY: Oh, gosh, man, there was hundreds. Very difficult to remember a specific. All the way from, “Hey, we ought to put carpet in here because it’s cheaper than linoleum,” to exotic stuff that people would agree to. So, I mean, no, I don’t remember a specific kind of thing, but the majority of them were small, little dollar things, and you get a minimum fifty bucks, something like that.

Safety issues. Somebody might argue, “Hey, you’ve got these cables going someplace and they ought to go somewhere else.” It’s worth fixing and doing. You wonder why the person in charge of the area didn’t have already done something like that if it’s that bad, but that’s what the system was for, to be able to propose new and better things, and it works. It’s still going. I don’t know who chairs it, but somebody’s still got the duty.

JOHNSON: While you were involved through the years, different management styles, programs, came through, TQM [Total Quality Management] and the different ones.

KELLY: Yes.

JOHNSON: Being involved with the different types of programs, do you have any memories?

KELLY: All of them come up with buzzwords and buzz phrases, and you've got to get the acronyms in there, and you do all that stuff. I don't know really know of too many people that changed their styles of management because of it. I mean, they may have had to write a report on it or show us some milestones on it and things like that. But it's always going to happen, because it's educational. It makes you stop and think about some things. There's a latest book that's out that I have read. I think NASA uses it, I'm not positive, but it's called *Who Moved My Cheese?* Have you heard of that book or read that little book?

JOHNSON: I've heard of it. I haven't read it.

KELLY: It's a fun little book. It's only that big. You can probably read it in an hour and a half. But it's about change, and that's what it is, people being reluctant to change. If you're going to progress, you've got to change. If you read that one, this is one of the more fun ones there was to read, but it's got a message. Most of the things come out like that. Somebody did their dissertation, and now we're going to try to implement somebody's theories.

I never felt anything particularly burdensome about any of that. You'd sit down and work it through and make the reporting systems work and try to take the good with it. I don't remember any of those being any big bad imposition. People gripe about it all the time, but they're going to gripe about something.

JOHNSON: You have to have something to gripe about, and it's good to blame it on things like

that.

KELLY: Sure it is. That's right.

JOHNSON: Looking back in retrospect, is there anything that stands out in your mind as far as the most challenging part of your job or the various positions you held, anything that was most challenging for you?

KELLY: Yes. I'm going to say two things. Number one, the first division I had, which was 102 people, trying to not meddle. I mean, if something goes wrong in a branch, you just personally go sit down with the guy and, "Hey, let's work this out and fix it," but with 102, you've got to work through supervisors. So that's a whole change in how you're going to run your life or run your business. So that was a fun time still, but, I mean, yes, it was a concern.

The other one was Space Center Houston. We had so many "It's going to go. It's not going to make it" days, that it was like a yo-yo sometimes. You get on a high and then you get on a low. But we never had anybody that weren't with us. It was just a matter of "How do we do it?" But we got it pulled off.

At this time I'll throw in Hank Flagg again. I've mentioned him several times. Hank's a marvelous lawyer, in my opinion. We wouldn't have pulled this stuff off without him. When we went to talk to the congressional staffs and who do I want to take, I said, "I want to take Hank." Hank's not going to make any of the briefings or anything like that, but he could just listen to me talking and guide me. I mean, the guy is very solid. He retired a few years after I did, and he's still in the area somewhere. I hope y'all talk to him, too, because this guy is really, really good.

He's a "do" lawyer. It's one thing when you sit down with a legal problem and the guy says, "Well, I don't like what you got. Go put something else together, and I'll review it." Well, that didn't help me. Hank says, "That don't work, huh? Well, let's sit down and make it work," and we'd sit there. I've been with Hank where we've spent many, many hours in the night trying to solve problems, instead of him saying, "Go make another shot at it and I'll review it tomorrow." He's a "do" lawyer. I respect Hank an awful lot.

JOHNSON: Starting out in engineering and then moving into getting your MBA and moving into the direction you did, did you, during your career, have any regrets? Because you were talking how you liked to be in there with your hands on. Did you ever have any regrets?

KELLY: No, I really don't. My wife used to get so mad at me when I worked at General Electric because we were in test cells and tough places all the time, and I'm walking in with oil on my soles of my feet and messing up the carpets about every night. It was fun jobs, just fun jobs. But when I was at GE, I asked them, I said, "I know you guys are going to want us to go to school," because GE has training courses everywhere. I mean, they train you all the time. I said, "What should I do? Should I go get a professional engineer's license? Should I go get a master's in engineering or what?"

They said, "Neither one. You've got a bachelor's. That tells us you're an engineer." If you wanted to go higher, that means you want to go research, I mean, not anymore, and they recommended you go get a business degree. Since also, by the way, Xavier came to the General Electric plant, so we took courses at General Electric. We ended up having to take a few courses where we'd go to the campus.

So I was kind of making the transition educationally then, because it seemed like the best thing to expand to. So I've never regretted it at all. I think I was very fortunate in having the opportunity come, and I was able to take it. If I was in engineering, I don't believe I could have ever been the Director of Engineering. [Laughs]

JOHNSON: Do you feel like that engineering background helped you, though?

KELLY: Sure. It's analytical. It makes you think. It makes you be able to try to analyze things. I think it is a very good background for any job you want to go to. I think it broadens you and not narrows you at all. Now, if all you work is engineering later on and become really expert at that, it probably does narrow you a little bit into your field, but that's what you wanted to do, concentrate, so you go get more education there.

But in NASA's case, our engineers also have to get involved in the business end of the business, because we're not manufacturing. We're not hands-on building anything. We're overseeing and monitoring and then also being responsible for budgets. I mean, engineers have budgets. It's not my budget. I'm helping them put it together, but they're the ones that got to make it happen. So I think in the NASA oversight world, engineering is great, but business practices are too, so. I never regret it. I think it's great.

JOHNSON: It sounds like you really had a wonderful career.

KELLY: Well, I thank Phil Whitbeck for him, for his faith in me, and then Chris Kraft for his faith in me, and Gerry. I mean, all of them gave me the rope. I didn't hang, I guess.

JOHNSON: Were there any difficult decisions that you had to make in any of your positions that you remember as being hard at the time?

KELLY: Well, the worst of all was RIF time, always when you have to—the decisions are somewhat mechanical. If you're a military type, you've got priority over nonmilitary types in the RIF process. You pick an area, pick a person, and that sets up a waterfall of who he can bump and all that kind of stuff, and it's just a mess, in my opinion.

Fortunately, I only had to go through that once, in 1970, with my division. I can't even remember how many people we lost. It was not a major number, but I mean it was still a traumatic thing, because JSC had not had a reduction in force. So that's always a bad thing.

Probably the other one I had was—I'd probably rather not use names.

JOHNSON: That's okay.

KELLY: I had two employees with drinking problems. They were good friends. I had to kind of convince them both to leave, and they did. I mean, they retired. It was early retirement. In one of them's case, I even went to bat to get him an award as he left, to raise his own esteem, self-esteem, because he was a great guy, in my opinion, but something in his life had changed that caused him some problems.

But those type of decisions are always tough. But I think—I still feel to think that both of them believed it was the right thing to do at the time. They've both passed on now, but I'd rather not say who they are.

JOHNSON: That's fine.

KELLY: But those are the kind. The doing the job part is not ever going to probably come up as somebody's big problem. It's the human part that's going to come up to be somebody's big problem. "I couldn't get promoted." "I'm drinking. I've got a problem." Those are the ones that get the manager, at any rate, because once you become the supervisor or the manager, now you become the human relations person, and that's where everybody's got the problem. I've probably had fewer than most.

JOHNSON: You said one of the biggest challenges and the thing you remember was Space Center Houston.

KELLY: Oh, yes.

JOHNSON: Would you also consider that your most significant accomplishment or contribution, and are there any others?

KELLY: That will probably be the most significant visible accomplishment, because you don't know what you did in the other world. If you ran 800 people in the best way possible and everything came out great, you did good, and that's a big accomplishment, but that's what you're expected to do, and it's kind of like lost in the sea. The big wave came with Space Center Houston. It was there. It was a hard thing to pull off, but a wonderful dream. Everybody

wanted it to succeed. We didn't have any opposition to it, that I can speak of, that I know of, in fact. So everybody pulling for you, it really helps, but it also shined the light on you.

So you use the best resources you can, and fortunately we pulled it off. But, yes, that was a pretty major individual other duty as assigned accomplishment, I think. But I never want to not ever give Hal Stall the credit, because it's his. It's his baby, his thought, his drive, and the rest of us caught the fever.

JOHNSON: Believed in the dream.

KELLY: Oh, absolutely. Yes. Absolutely. Everywhere we'd go, everybody was just, "What a great idea. Now, where do we get the money?" Everybody's, "Yes. Now go get money. I'm all for you, but I can't pay."

JOHNSON: Well, before we close, I'm going to ask Jennifer and Summer if they have any questions.

KELLY: Okay.

JOHNSON: Jennifer.

ROSS-NAZZAL: I found it interesting that you had an engineering degree and then you got a master's in business administration, but yet you started out at the Center as technical writer. Can you tell me what sort of things you had to do to learn about the systems that you were writing

about and how you were qualified?

KELLY: Well, I'm an editor. See, what we did, the technical people would write about the control systems on the Mercury, whether the environment system worked and all that jazz. Most engineers just write. I mean, they ramble and write. It was my job and John Boynton's job to take those papers and I'll call it editing, but put it in better English, better shape, and that's what we did. You'd pass it back to them, make sure, "Hey, we don't want to change your meaning. We don't want to change your essence." They all knew that.

Then there had to be two versions. So we were responsible for knowing which version could go to the public. It's not that you want to hide, but the Air Force missile was classified. That wasn't NASA's choice. If you're going to write about that missile, that's classified, back in those days. It probably didn't have to be then, in my opinion, but it did. So that's what our job was, was more editorial.

Now, when I was GE, I'd write. I mean, I'd write reports. But whether they were good or bad, I don't know.

ROSS-NAZZAL: Did you have any training in college in technical writing or experience at that level?

KELLY: No. Just pure English, just going through English classes.

ROSS-NAZZAL: Also I noticed that you successfully went from being an engineer to being a manager. How did you make that change, what sort of evolution?

KELLY: Most NASA managers are engineers. If you'll notice, though, I went through every management step or every supervisor step. I was an aerospace technologist. I guess that's what our title was. We used to kid about that title, aerospace technologist, AST, because when we first got to Houston, every bank in the world was wanting to know if you wanted to borrow money. I said, "Gosh, what do you all think that stands for, 'A sure thing' or something?"

But, see, I was working for Clint Taylor. Then I became his deputy. So you're sharing management duties while you're learning. Then when a branch came open, Joe Shea needed a branch chief, I'd go get the branch. Well, I've already had deputy branch, so it was a progression. Then above the branch is a division, so two or more reporting, so that was the next step, and then to a director, which is divisions reporting. So my progress was through each step so that you learn as you go.

I guess some people are a lot better. They go from bottom to top, but I didn't do that. The only thing I never had was a section. I don't even know if JSC has sections anymore. They used to have sections. I never had sections in any of my divisions, because I didn't see any need for them. There'd be a section, two or more would report to a branch, two or more branches to a division, two or more divisions to a director. So I went through every step but a section because we didn't have sections. JSC was trying to get rid of sections. It was trying to get a bigger span.

I think the old management schools talked about span of control, and the newer modern schools talk more about a flat organization. I think JSC was trying to get to a more flat, and the easiest way to do it was to get rid of sections. At least that gets rid of one level, at the lowest level.

So I guess it's just because you went through it is the way you did it. I mean, you go to

business school. You take some management courses, especially in an MBA program. You take economics and accounting, but you also take business and business practices. Then the public administration courses were the same thing, but shifted more to the government versus the business side. So I've had both educationally. But you were doing those while you were still working. That's all I know to say, progression.

ROSS-NAZZAL: That was great, thank you.

KELLY: Fortunately, my bosses gave me those opportunities. You've got to be at the right place at the right time. That's pretty important.

JOHNSON: That is important.

Summer?

BERGEN: Yes, I have a couple of questions also. You mentioned when you went to work for Mr. Kraft that he told you you could do what you wanted to do when you got in that level position, so when you entered that position and he told you that, what did you want to do?

KELLY: Well, on the management side of stuff. When you're in the line, you have a job description, and that's your job. Obviously, not everything is written out, but it's more clear. On the staff, as a management assistant, whatever is coming up in the business and the management thing, he wants me to worry about it for him, anywhere from procurements to budgets to travel.

Now, the biggest problem I ever run into is travel. That is always a mess, who can travel.

Everybody thinks they should have a perk, and the government's pretty nasty about travel. One of my favorite problems of travel was with Deke [Donald K.] Slayton, who is an astronaut. I have to think how this went. But anyway, he went on a trip, and he came back. Let's see, he came back on Saturday. He was due back on a different day, anyway, but he elected to come back at a different time, and he came on Saturday. No, he came on Sunday. He was supposed to come back on Saturday, and he came in on Sunday. When he came in, Metro was not flying. Metro used to be a little airline that flew between [Houston Bush] Intercontinental Airport down here at the little airport on Highway 3, which is no longer there. I mean, it's probably a different place.

When he submitted his travel for payment, the people denied his return cost because he took Metro and Metro don't come on Saturdays, when he came home. He was supposed to come home. The travel regs [regulations] say if you're going to deviate from your itinerary, then the government will reconstruct your method to the best benefit of the government, period. It took somebody pretty smart to come back and say, "Well, Metro doesn't even fly. You can't pay that bill." So it was denied. So I had a hard time explaining that to Mr. Slayton, but that's what happened. It was kind of crazy. It didn't make sense to me either, when he brought me the problem. So I go down to the travel folks and say, "Man, what were you guys doing?" They open the book and there it is, pretty clear.

BERGEN: Those personnel issues again.

KELLY: Yes. Oh, yes. In fact, we had another guy—that he was going overseas, and he had looked it up, and it was cheaper for him to go a foreign flag. I told him, "You cannot do that.

Doesn't matter whether it's cheaper or not. Fly American Act, you fly American carrier, unless there's not one available." He didn't care. He flew it any way, submitted a voucher, we turned him down. He made an appeal, and he took it to lawyers. His lawyer told him, said, "Man, you're dumb. They told you not to do it." Just because it's cheaper doesn't stand you in any stead. The Buy American Act was not designed to save money; it was designed to help American air carriers. So that was kind of a hard nut to crack, but it makes sense that you should get paid. But he paid his own way, because we wouldn't pay it.

BERGEN: I've got another question. You've mentioned Enron and Ken Lay a couple of times today. Being a high-level manager over a large group of people, you actually said you only know what people tell you.

KELLY: Right.

BERGEN: So in that situation, how as a manager were you able to get people to tell you the information that you needed?

KELLY: Two ways. Number one, staff meetings. I would have staff meetings with each of my divisions. Number two, my door's always open. Anybody can come see me.

Another little story there. This little gal named Claire Martin [phonetic], when I first had my division, Claire Martin I think was probably a GS-9 buyer, and I'd made my talk to my people when I got there and told them who I was and all that, my door is always open. When I moved away from that division to the Assistant Director for Procurement, I got a call from Claire

Martin, said, “Is your door still always open?”

I said, “Yes. You need to see me?”

She said, “No, I just want to make sure it’s always open.”

When I moved to Kraft’s staff, I got the same phone call. When I moved to director I got the same phone call. The lady never came to my office, but she called every time I moved jobs, wanted to know if the door was open to my office for her. It always was.

Claire—it’s hard for me to remember times, but it’s probably, I don’t know, seven, eight, ten years ago she passed away. She was never more than a GS-9. She was never married. She left an estate in excess of a million dollars. None of us have any idea how she did that, but she did. She must have been very smart in the stock market.

JOHNSON: I was going to say, not investing in places like Enron.

KELLY: But that little lady stands out, that she just wanted to make sure.

So that’s how you do it. You have regular staff meetings. There used to be a management theory that I believed in, management by wandering around. I think most of you have probably heard that, and I did that. I wandered around. People wouldn’t be surprised if I show up in the shops when they reported to me and chatted with the guys, “How’s it going? What’s happening?” If they know that you really care, if they got something to say, they’ll tell you. Now, you’ve got to be very careful how you use data, but I felt I was getting it, and I hope I did.

I also tried to take and combine some meetings so that those people would get the flare of—like a budget and a procurement guy, because budgets are always arguing about the

procurement guy and the procurement guy is always arguing about—so I'd get them in staff meetings together, little meetings just for them and talk together. They'd hear each other's problems and found they were pretty common. I think that helped. So it's just little techniques you try. Works for some people, don't work for others.

BERGEN: Thank you. That's all I had.

JOHNSON: Something hit me while you were talking. You were talking about the banks being open and wanting to give you money. We've had some other people come in here and say that when they first came here the banks were just—they didn't have to do everything. Anybody was willing to help.

KELLY: You're an AST, man.

JOHNSON: But when you got here, you were already married?

KELLY: Yes, had two daughters. Had the third one when I got here. Two were Yankees from Cincinnati.

JOHNSON: What was your family's and your impression when you came to the Gulf Coast of Texas?

KELLY: Hot. Well, house heaven and hot. In Cincinnati, I owned a house. I paid \$16,300. It

was 972 square feet, and that was in 1957. I moved to Texas in [19]‘62, and for ten bucks a foot you got all can think about. You might remember those days. Ten dollars a foot bought you a house that’s air-conditioned and fully fixed and the garage was two-car garage and finished. My garage was one car and not finished, the whole thing. House heaven and hot.

JSC wasn’t here, so you’d drive down here. Where are you talking about? There’s no way this is going to look like this. So we were in buildings all over the city. I started out in the Houston Petroleum Center, was the name of the complex. It’s up off on the Gulf Freeway, and there’s a big oil derrick in front of it. It’s a bunch of buff-looking buildings up there near Wayside. That was where the Mercury Project Office was, as well as a few NASA offices, but that’s where it was.

Now, when Mercury ended, they took us and put us in Ellington Air Force Base, and that’s where I was, by the way, when [President] John F. Kennedy was assassinated. We were at Ellington. We stayed there until we found a permanent home, and that was like probably one of the best moments of your career. They came to all of us and said, “You are a billet. Go find a job.” Well, anybody can hire. You’re a billet. So everybody wanted you, not because you were great, but because you were a billet. That gave them another position. So I got to go out and test the field and say, “I’m looking for a job,” and so that worked out pretty good.

Then when we went with the Apollo Program, we moved to Office City. Now, Office City is a set of buildings directly across the street from Gulfgate Mall. I forget the colors there, but they got some red tiles that made that two-tone. From there in February of [19]‘64, I came on-site, I moved on-site. The buildings were finished. At the time it was called Building 2. It’s now Building 1. So that’s all over the place.

JOHNSON: Did your family or your wife think you were—

KELLY: Well, it's kind of interesting because when I first came here, I lived with Jack Skinner, the guy I talked to you about that came down here, because Carolyn [Kelly] was back home trying to sell the house and the car. So I was here in September, and she didn't get to come down until after Thanksgiving, when she finally got rid of those things. I mean, the housing market up there was very, very bad. General Electric had shut down an entire division, nuclear propulsion division. I mean, I lived in a housing project where 1,000 houses with about ten floor plans, so there was fifty of my kind on the market. So it took her that long to get that done.

So when we moved here, we rented for two years. The first time we moved to Friendswood in [19]'64, we built a house down here. I found that place kind of interesting because I was going to a church off Kings Point Road called Cokesbury Methodist. Now, Cokesbury is now on a different street, Fuqua, I think now, but it used to be on Kings Point where Vietnamese Martyrs is, if you are familiar with the Vietnamese Martyrs church it's up near Alameda Mall, it used to be.

The preacher called me up one day. It was the brokest church I've ever been in, by the way, that Methodist church. We'd flip a coin to see who was going to get paid this month. But he called me and said, "Hey, it's Palm Sunday coming up," and we didn't have any money to buy palm branches, but he wanted to go down to the creeks in the Friendswood area and pick up palmettos. He said they would work, would I go with him. So we were down there doing that. We come up out of this creek on to the street, a brand-new subdivision, Imperial Gardens, and, gosh, that looked pretty good. There was a wooded lot there for sale. I took all the data down and went down and talked to the people and bought that lot that moment.

It was kind of interesting, because the guy's name was O'Farrell, Paul O'Farrell, and Paul and Al were a realty office. Paul has moved to Angleton [Texas], but Al O'Farrell still has his real estate office and building in Friendswood. My wife has been working for him now for nineteen years. He built my current house. That's how I got to be friends with him, because I was down there trying to find some palmettos to take the place of palms on Palm Sunday.

JOHNSON: That's a nice community.

KELLY: Yes. Oh, yes. Yes.

JOHNSON: Like what you were saying earlier, grown quite a bit.

KELLY: Yes. But at any rate, I had two daughters when we moved, and then we had one that was born when we got here. They, my three daughters, now have eight grandkids for me. The first seven were boys. Finally had a little girl. She's now five years old. The oldest is fifteen, so they range between five and fifteen. They all live within ten minutes of my house. So when I retired, people said, "Where are you going?"

I said, "I'm not going anywhere. Everything I want is right here." Two of the other sets of grandparents are also in the same town, Friendswood. The third one was, but he lost his job, I don't know, ten, fifteen years ago, and he moved to Granger, Texas. So it's not that far away.

JOHNSON: Still close.

KELLY: So the kids went with their high school sweethearts, married their high school sweethearts, and none of them got married until after they were out of college. So they knew each other long enough, if there is ever a problem. None of the in-laws or their parents have ever been divorced.

JOHNSON: That's amazing in this day and time.

KELLY: We said fortunately these kids have got all of the stability they needed. Now, can they make it? Well, this will be, let's see, what is this—2002. The first one got married in [19]'82, so this will be the twentieth year, the next one in '84 and then '86. So it's pretty good.

Two of them have got two boys, and one of them's got three boys and a girl. One of my son-in-laws works at JSC. He's on the division staff, Quality Engineering Division. His wife is wondering why I haven't called yet, because I told her afterwards I'd come get her for lunch, which I will. She works for SPACEHAB, used to be Johnson Engineering. It's now SPACEHAB, over off of something Forge Road or something like that.

The rest of them have nothing to do with the space business. But I do have one daughter who in an accountant. She is assistant comptroller for Baker Hughes [Inc.], and you can imagine what her bosses have asked her lately.

JOHNSON: Yes. That's true.

KELLY: Every day. I said, "Well, you've got a 401(k) plan, too. What happens there?"

She says, "Their match is cash. They don't match in stock." So you can take it and do

with it whatever you wish, but they do not match in stock.

JOHNSON: After you retired from NASA, did you continue working as a consultant?

KELLY: Yes. I worked with Neal and Associates, Jim Neal. Jim had been my procurement officer for many, many years, and so I just went into a consultant business with him up until about probably two and a half, three years ago. He moved to Hendersonville, North Carolina, and he's actually shut the company down, but he didn't do that until last year. But I don't solicit business, and I told him that. But I still get a call every now and then. I still do.

I did taxes for H & R Block. I worked for H & R Block, worked out at Pearland [Texas] for seven years, and this year told them I was not going to work anymore. My boss of last year, who is also there this year, called me up and said he's going to kill me, but I got burned out last year with that. We were supposed to have six preparers in that office during the daytime. We only had four of us, and I mean, man, I didn't do it to make money, because H & R Block don't pay anything. I did it because I went to their tax school. I wanted to go to their tax school. It's the best in the world. IRS [Internal Revenue Service] uses Block forms and puts their names on them. I mean, they let Block do all the work. So I went into school, and they offered a job, and I decided, yes, I'll take it because I can work when I want to work. You name when you'll work. But last year, after the seventh year, with only four preparers, you had to work more than you wanted to work. You said, well, you didn't have to, well, no, you don't, but then one of your friends has to. I mean, it's that kind of—when you've got four people doing it, you know them pretty good.

But I did quit. I did that. I did the consulting work. I play a lot of golf. I mean, I call it

golf. There's a lot of folks don't call what I do golf, but I do.

JOHNSON: Enjoying your retirement.

KELLY: Yes, I am, especially with all the kids around. Like today at four-thirty I've got a basketball game, ninth grade basketball game, two of my kids are on. My two oldest grandsons are on that ball club, although I'm not sure one is going to play. He's been sick all last week with a stomachache. I mean, he really doubled up. They took him to the doctor and the doctor did something and told them he didn't see anything, sent him home. They got uptight over him not doing anything, so they took him to the emergency room day before yesterday, Saturday, which they took blood, urine, and X-rays and everything else and concluded they didn't think he had anything either and sent him home. So this doctor told him to do that, and they got mad. They just spent a whole bunch more money to get the same statement. Probably a little flu virus.

So he went to school yesterday, but I'm not sure they'll let him play today. He's probably pretty weak after a week of that.

JOHNSON: Probably so.

KELLY: That's too bad. He's their best little point guard.

JOHNSON: If you do say so yourself.

KELLY: Yes.

JOHNSON: Well, is there anything else that we haven't talked about that you wanted to mention before we go?

KELLY: Well, gosh, I don't think so. I mean, it's been a great career for me. My colleagues are outstanding. Every time I read and see their names, some of them, still, names in the paper, Gene [Eugene F.] Kranz writes his book, Chris has written a book, those are tremendous people.

So I couldn't have asked for a better life. Proud to have been here, proud to be still be here. Hardly ever come back on base anymore, though. I used to get uptight when some of the retirees would come back as if they still owned the place, so I don't do that. I come to retirement parties every now and then, except all my peers are gone.

JOHNSON: Well, you can come back and visit at Space Center Houston, of course.

KELLY: Well, yes, I do that. I can get in there. Plus I put on a charity golf tournament every year for a place called Innovative Alternatives, which there's a little gal that went to school that founded that, she went to school with my oldest daughter, and her dad and I play golf all the time. We're all the time together, and he's retired NASA, also. I was on their board for a number of years, but I put a golf tournament on for them, and Space Center Houston supports me with that.

Last year we had four astronauts challenge the field. I got some of my friends. I called Joe [Joseph P.] Kerwin and Dan [Daniel C.] Brandenstein and Mike [John M.] Lounge and Rich [Michael Richard] Clifford. If you know those folks. They agreed to do it, and Space Trader

Gift Shop at Space Center Houston underwrote that. I say underwrite it, they gave us hats, baseball or golf hats, whatever. They got both NASA logos on it, the worm and the meatball, if those terms mean anything to you, and then the Space Center Houston logo on it. All four of the astronauts signed on the bill, and anybody that beat them got one of those.

Then like I say, Space Center Houston provided the hats, and so I do get over there at least to talk to them about sponsorships, because that comes from the store, which is Marriott [Corporation], but they've always helped. Richard gives me anything I want, and I usually ask him to give me twelve tickets, and what I do with those twelve tickets is I put them in fours, and we have door prizes so you can win four tickets to Space Center Houston. That's a \$50 present or fifty or sixty. Adults are like thirteen, fourteen bucks these days. Last year he gave me some 50-percent-off coupons, which is the best discounts they have anywhere, and they're called VIP coupons, and I had one for each of my golfers. So Space Center Houston is not only a great place to go, they support at least that charity, which we appreciate very much.

JOHNSON: Well, it was really nice having you here, and we appreciate you taking part.

KELLY: Thank you.

JOHNSON: Thank you very much.

KELLY: I look forward to, I think, seeing it.

[End of interview]