

**NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT
EDITED ORAL HISTORY TRANSCRIPT**

ROBERT L. "HOOT" GIBSON
INTERVIEWED BY JENNIFER ROSS-NAZZAL
HOUSTON, TEXAS – NOVEMBER 1, 2013

ROSS-NAZZAL: Today is November 1, 2013. This interview with Hoot Gibson is being conducted in Houston, Texas, for the JSC Oral History Project. The interview is Jennifer Ross-Nazzal, assisted by Rebecca Hackler. Thanks again for taking time out of your day to spend some time with us.

GIBSON: Good to be here. We should have done it yesterday when it was all raining, but good to be here.

ROSS-NAZZAL: That would have been better, because now you're stuck inside and it's really nice out. I thought this might be an interesting question to start with: your nickname is Hoot, how did you get that nickname?

GIBSON: It's a very unoriginal nickname. I'm very fond of saying I got it because of the expression "not worth a hoot," but in actuality, it was from the cowboy movie star of the 1930s, who was called Hoot Gibson. If your last name is Gibson, you're most likely going to get "Hoot" for a nickname. I have known several others. My dad told me that when he was younger, it was one of his nicknames. He would get called Hoot Gibson. Once I got to my first fighter squadron, I remember the operations office asked me, "All right, kid, you got a nickname?" My first name is Robert, so I said, "Well, yes, sir—Bob." He goes, "No, come on, I

mean a real nickname." I said, "Well, occasionally I've been called Hoot," and that was it. That went on my airplane, that went on my nametag, it went on my coffee cup. So, from that day on, I wasn't Bob anymore, I was Hoot.

There was a funny story. My dad showed up at a lecture that a couple of the guys from my squadron were giving, and he walked up to them afterwards and said, "Hey, I'm Paul Gibson; my son is a pilot in your squadron." They said, "Who's that?" He said, "Bob Gibson." They looked at him, and they said, "Bob Gibson? Bob Gibson? We don't have a Bob. Oh, you mean Hoot." My name had changed so thoroughly that most nobody knew what my real name was.

ROSS-NAZZAL: That's funny. I told my husband I was going to be interviewing you today and I asked him that question, he said, "Oh, I wonder if it's because he's such a hoot to be around?" I said, "I don't know."

GIBSON: Not worth a hoot.

ROSS-NAZZAL: That's a good story. Tell us about your interest in space and aviation as a kid.

GIBSON: Aviation, I was involved in literally from the time I was an infant, and that's because Mom and Dad were both pilots. In fact, that's how they met. My mother decided that right out of college she was going to learn how to fly. She and two of her girlfriends from college bought an airplane, which was called a J2 Taylor Cub, and were learning how to fly that airplane, and that's how she met my dad. That's how they got together, was through the flying. From the time

I was a little kid, I've been flying with them. I did all the typical pilot things: soloed on my sixteenth birthday and had my private pilot's license when I was 17. And so, [I] had been involved in flying, like I say, literally all my life. Pretty well knew that when I finished college I wanted to go fly jet fighters. That came to be because I did sign up for Navy flight training, and I think you wanted to go into that, right? Into that part of the story?

ROSS-NAZZAL: Absolutely.

GIBSON: I signed on with the Navy while I was still in college, although I didn't do anything with them other than take my oath of office and be sworn in and then be given orders to go back and finish college. When I graduated from college, I was hoping they're going to tell me, "Okay, you're graduating here June 7, we want you to report September 10," or something like that, so I'd have the whole summer in California. No, June 24, so I had two weeks and then reported to [Naval Air Station] Pensacola to start Officer Candidate School. Once I finished Officer Candidate School, which was about 16 weeks or so, then it was off into pilot training in the Navy. That altogether takes about a year and a half. I started in the end of June 1969, and I pinned on my wings in January of 1971, so just a hair over a year and a half.

From there, I got sent to what the Navy called a RAG, the Readiness Air Group, for the F-4 Phantom. I wound up getting my first choice of assignments out of pilot training, and that was in the F-4s. It shouldn't have taken as long as it did to get through, but they had an unacknowledged pool of pilots in this squadron, so it was eight months before I made my first flight in the Phantom from the time I got there. Immediately, I went right on through because, of course, at this time, the Vietnam War was fairly well raging.

I finished my training, and I got packed up and shipped from San Diego [California], which is where the squadron was and where I was based. All of the Navy fighter squadrons on the West Coast were based out of Miramar Naval Air Station in San Diego. When I finished my training, I had done fairly well, and so they sent me off to join a carrier in the Gulf of Tonkin engaged in combat operations already. For a normal flow, what you would do is you'd finish the training squadron, the RAG. You'd go to an operational squadron, and you'd be in San Diego with them for six months or seven months and then hop aboard the carrier and sail across to Southeast Asia. In my case, I just packed my bags and flew over and joined the USS *Coral Sea* in the Gulf of Tonkin, so, golly, within two weeks of when I finished the squadron, I was flying combat missions over Vietnam.

ROSS-NAZZAL: Had you flown into and onto carriers before that time?

GIBSON: Yes. Going through pilot training between basic training, you will do four carrier landings in a basic type of jet, and then in advanced training, it'll be a high-performance swept wing jet, the TA-4 Skyhawk, and you'll make six landings in that airplane. Then, you receive your wings. All of those are daytime, however, and then when you go to the RAG, the F-4 Phantom RAG, now you're going to get something like—how many landings was it? It was like 18 landings, and for the first time, you're going to go to the ship at night. You're going to get night carrier qualified as well. I'm thinking it's something like 10 night landings that you've got to get, so it's fairly involved to get through all of that. So yes, I was all qualified to be launching off a carrier and coming back, so at that point, I had somewhere around 25 or 30 carrier landings

at that point. We were flying every day, sometimes twice a day, so I built up carrier landings very rapidly flying the combat missions that we were doing.

This was 1972, and that was a very intense year of the Vietnam War. In fact, it was the most intense air war in all of the Vietnam War. The air war in 1972 is what finally brought them, the North Vietnamese, to the negotiating table and basically ended hostilities there and got us back all of our POWs [Prisoners of War]. It was all of the action of 1972 that brought them to the table. At this point I was all of 25 years old, flying combat missions over North Vietnam, and we went everywhere. We went to Hanoi and Haiphong and all of the high threat areas, and we were confronted with surface to air missiles and AAA, which is anti-aircraft artillery. There was plenty of threat, and in fact, my carrier on that cruise, the USS *Coral Sea*, had nine airplanes shot down. We had nine airplanes that we lost in combat, so it was a very intense year of warfare and explains why when I flew home after that cruise—we came back, I think it was July of 1972. When we got within about 300 miles of the California coast, we launched off all the airplanes that we could launch, so I flew back into San Diego. Dad and Mom were there, waiting, and that's when Dad told me, he said, "You will never know how, for the last six months, I wished I'd never taught you to fly."

ROSS-NAZZAL: I can imagine that must have been heartbreaking for them to watch the news.

GIBSON: Yes, Dad was not happy with it. He was really pleased and really happy that I had done so well flying and that he was the one that taught me how to fly, but I can just picture him sitting there, reading the news every night, and reading about another couple of airplanes shot down.

ROSS-NAZZAL: Did you have any close calls when you were over there yourself?

GIBSON: I never got hit. I had lots of projectiles go by me very close but never got hit. I would say not really, not really any close calls.

ROSS-NAZZAL: That's tough.

GIBSON: Yes, it obviously bothered him a lot more than it bothered me. People ask me if I was scared. I don't know that I'd use the word "scared." I was very apprehensive. When you've got tracers coming by your canopy, it'll get your attention. Those really light up the sky, but the ones that are a lot more dangerous were the radar-guided antiaircraft guns, where they'd have a radar tracking you, feeding that information to a computer, and the computer aims the guns at you. It knew how to lead you, it knew where you were going, and that's why when you were flying over North Vietnam, you never flew in a straight line for more than 4 seconds at a time. You were constantly jinking, what we call jinking, so you might be straight for a couple of seconds, looking somewhere, and then it's time to change altitude, change direction, because this radar is projecting your flight path and it's going to put a bullet—sometimes these were big bullets; the normal ones were 57-millimeter, which is golly, 57-millimeters is almost a 3-inch shell—and they could put it right where you're going to be in 8 seconds, so you don't want to be there 8 seconds from now.

ROSS-NAZZAL: Was that something you had practiced training before you went, or was that something that they had told you when you got there?

GIBSON: Both—you got told it, and we also flew missions in the simulator. Before I finished the RAG, you'd fly missions in the simulator. If you weren't jinking, they'd shoot you down in the simulator, and they'd say, "Okay, you forgot to jink, didn't you? So you just got shot down." Fortunately, just in the simulator.

ROSS-NAZZAL: It was sort of engrained by the time you went over there?

GIBSON: Yes, oh, yes.

ROSS-NAZZAL: What did you do once you came back to the States?

GIBSON: That was just my first cruise, and then I came back from that cruise, which for me was 1972. The ship had actually left the end of 1971, so I made about half of that cruise. That was the only combat cruise that I wound up making. We were due to go back in February of 1973, February 9, 1973 is when we were supposed to leave, and on January 31, the ceasefire was signed. We got delayed by a month, they gave us an extra month, and we didn't leave until March. In the meantime, we got a bunch of new pilots. Some of our older pilots rotated out and we had new pilots, new back-seaters. The Phantom had two people. It had a pilot and a radar intercept officer in the back seat, who is not a pilot, our radar operator. So we had a bunch of new people come in.

I got picked, even though I was one of the junior pilots in the squadron, to go to "Top Gun" on that turnaround. I'm trying to remember, it would have been August or September of '72, I went through the "Top Gun" training course, which of course got made really famous by the movie, 14 years later. Golly, what a fascinating thing that was, to get to do "Top Gun." My first dogfight was against [Randy] Duke Cunningham, the Navy's MiG Ace. Turns out he shot down his third, fourth, and fifth MiGs on May 10, 1972, which was a day that I flew a combat mission as part of a big strike group from the *Coral Sea*, and Mike [Michael L.] Coats flew a combat mission as part of a strike group from the *Kitty Hawk*. He flew a strike that day as well. In fact, the *Coral Sea* went in first, and there were no MiGs that came up. Then the *Constellation* went in and got jumped by a dozen MiGs, and that's when Duke Cunningham, Randy Cunningham, shot down his third, fourth, and fifth MiGs to become the first Ace of the Vietnam War. Then, Mike Coats and the *Kitty Hawk* came in after that. They'd all been shot down by then, so there weren't any more MiGs left. Not really; there were still plenty of MiGs left, but they had been beat up so bad, they didn't come up.

Brewster [H.] Shaw flew that same day. He was an Air Force F-4 pilot. I saw a book written by Jeff Ethell [*Fox Two: America's First Ace in Vietnam*], well, I bought the book and read it, and Jeff Ethell didn't even mention that I flew that day, but he did mention that future astronaut Brewster Shaw flew out of Thailand, I think. We had a number of Space Shuttle astronauts that were involved in the Vietnam War and even specifically May 10.

My first dogfight was against the Navy's MiG Ace, and he was in a stripped-down, souped-up A-4 Skyhawk, and I didn't shoot him down but he didn't shoot me down, so that was a pretty big victory for me, not to get shot down by the Navy's Ace. "Top Gun," like I say, was really, really fascinating. Then we went ahead and left on cruise March of 1973, and we really

didn't do much of anything over there. We were still in the Tonkin Gulf, off the coast of Vietnam. We did some photo reconnaissance; we did some monitoring of what was going on, but no combat flying. We did a lot of night flying. Towards the end of that cruise, at this point, it's about time for me to rotate from sea duty, which would be a sea-going operational squadron, back to shore duty.

The commanding officer of the squadron came to me one day—and he just happened to be a back-seater, and he just happened to be my back-seater because he had chosen me to be his pilot, so he must have felt I was pretty good because the senior radar intercept officers in the squadron wanted to fly with the more safe pilots—and said, "How would you like to make another cruise?" I'm thinking, "Oh, no, it's time for me to go to shore duty." I said, "Oh, Skipper, I don't know." He said, "In the F-14 Tomcat." I said, "Really?" The Tomcat was just coming to fruition then and was just getting ready to join the fleet. It turned out that they looked at the first two squadrons, and they said, "You know what, we don't have enough junior pilots in these squadrons." They were heavy on more senior pilots. They said, "We need some more relatively junior pilots, so we want three pilots from the West Coast and three pilots from the East Coast." The East Coast fighter squadrons were based at Oceana, Virginia, which is right near Virginia Beach, Virginia.

They were going to pick three pilots that had at least one cruise and were relatively junior. I had a cruise and a half. I wound up being one of the three pilots picked off the West Coast to go to Fighter Squadron 1, which was, along with Fighter Squadron 2, [one of] the first two operational Tomcat squadrons. I joined that squadron, and this time I had a normal turnaround. I joined them in December of '73 and then we left on the first cruise the next September, September of '74. We went to the Tonkin Gulf, and at that point, things were falling

apart in South Vietnam. I remember there was a press release that North Vietnam issued that said we were there saber-rattling and brazen provocateurs is what we were for being in the Tonkin Gulf with this brand-new fighter, the Tomcat. We didn't do a whole lot. We sailed the Tonkin Gulf, we did flight operations in the gulf, just to let them know we were there.

South Vietnam was falling apart very rapidly. We were supposed to have left and come home, I think, in March of '75, and all of a sudden, it developed that South Vietnam was just going to fall. We were extended an extra month to provide fighter cover for the Fall of Saigon. Over there it was April 29, 1975. Over here, because of the International Date Line, it was April 30, 1975. That's the day Saigon fell, and that's the day that we launched all the helicopters in to pick up the last few Americans and the last few Vietnamese who had worked with us very closely and a large number of members of their military and their families. I flew fighter cover that day, overhead Saigon, the very last day of the Vietnam War. The helicopters came in and picked everybody up, and they were landing on the rooftops around Saigon, and on the embassy grounds in Saigon. Like I say, I flew one of what we called Combat Air Patrol, or CAP, mission overhead, armed to the teeth, in case they shot any of our helicopters down or shot at us or anything like that, none of which happened. They just wanted to let us get in there, get our people, and get out, so they didn't shoot at us at all.

They called it a combat mission, so I had one combat mission in the F-14 Tomcat. It turned out to be my very last carrier landing because when I came back in and landed after that one, we buttoned everything up and pulled out and headed back to California. I got back from that cruise and then I did go to shore duty as an instructor in the F-14 Tomcat, but I didn't want to be there. I had someplace else I wanted to be, and that was Test Pilot School. My dad had been a test pilot and an aeronautical engineer, so I'm sure there was a bunch of hero worship, and

he was my hero. I wanted to be an aeronautical engineer, and I wanted to be a test pilot. I actually had a little bit of trouble getting to Test Pilot School because the Navy had said, "F-14 Tomcat training is so expensive that once you get into the Tomcat, you can't come out of it." Only they had let one of my squadron-mates go the year before to Test Pilot School, and then I guess maybe they made the rule after he went. They said, "We're not going to let anybody get out of the F-14 Tomcat. Once you're in it, that's all you're going to do." I really wanted to go to Test Pilot School. I wound up working as an instructor in the F-14 Tomcat for about nine months.

Meanwhile my Air Wing Commander found out about all this, and he was an air wing commander aboard the *Enterprise*. He was a Test Pilot School graduate as well, and a former test pilot, of course. He was determined he was going to help me, so he actually called the skipper of Test Pilot School and told him, "Hey, there's a guy that you need to have there." I was a little bit embarrassed by it all, and I was a little bit put off by it all, Next thing I knew I got a call from the commander of the Test Pilot School, telling me that the reason I hadn't been picked was that the Bureau of Personnel had refused to let my application go to the board for the Test Pilot School. So he said, "Send it directly to me," so I mailed it directly to him, and then lo and behold, the very next selection board, I got picked for Test Pilot School. The thing was, I was a really good candidate for Test Pilot School because I had an aeronautical engineering degree, and many of the test pilots don't have an engineering degree. You could have a history degree and get picked to go to Test Pilot School, but I also had, by now, fleet experience in two different types of fighters. That's a very valuable thing for a test pilot.

That's what got me to Test Pilot School, was a whole bunch of help from buddies who had been to Test Pilot School. Rick [Frederick H.] Hauck had been the Air Wing Operations

Officer aboard the *Enterprise* on my last cruise, and he was a Test Pilot School graduate. Like I say, I had a bunch of help from people to get my name in front of the Skipper of the school. That was a one-year course, and I've never worked harder in my life than Test Pilot School. College was not quite as difficult, even astronaut training wasn't as difficult as Test Pilot School. I did very well in it and went to flying test flights in the F-14 Tomcats, which you always have continuing projects, even though the airplane's operational and it's out in the fleet now, there were several malfunctions that happened. In fact, one accident that killed my roommate. "Hoot, go do some flight testing and figure out what in the world happened here." We also had an incident where an airplane lost three-quarters of its roll control, so what in the world happened there? You're doing flight tests like that. I also had a major new project for the Tomcat, and that was the first reconnaissance version of it. I got to do first flight in that and all the structural demonstration, which involves high-G, high mach number, 6.5 Gs at one point, 1.65 mach, rolling turns and things like that. Did all the envelope expansion, structural demonstration

About that time, NASA went out with the call, the very first call for astronauts in nine years. It had been 1969 since we had had any new astronauts come in, and I'm pretty sure those were the Manned Orbiting Laboratory guys. They had not picked astronauts since then because they just didn't need any. I had not really been interested in being an astronaut prior to Space Shuttle.

ROSS-NAZZAL: You hadn't followed the space program?

GIBSON: Oh I followed it, I watched it, I watched the Moon landing. I was in Officer Candidate School at the time. We were all living in the BOQ, the Bachelor Officers Quarters, and we

didn't have a television, so four of us hopped in one of the guys' cars, went and rented a motel room for the night that had a black and white TV in it, just so we could watch Neil [A.] Armstrong get out and step foot on the Moon. I was fascinated by it, but I had no interest in doing that because I was an airplane person, and none of those had wings on them. Now, all of a sudden, one day I'm looking at *Aviation Week* magazine, and I flip the page, and here's an artist's concept of a Space Shuttle flying a reentry to come back in and land. This is like the Walt Disney series of the 1950s, the three-stage rocket to space that had the big Delta-Wing Glider on top of it, that, of course, I got to watch on TV. My mom even had the book by Willy Ley, and it was called *Space Pilots*. I was interested in a space ship that had wings on it and flew a gliding reentry and landed on a runway. I remember looking at that picture and saying, "Oh, man, I have got to get me one of those."

From that moment on, I was hooked. It really didn't change my direction in the Navy any, and this happened before Test Pilot School. I knew I wanted to be a test pilot anyway, but if you wanted to be a Space Shuttle pilot, I knew I would have to be a test pilot as well, so it really didn't change anything. It just really enforced the idea that, okay, I have got to get through test pilot school because I want to fly those. I guess I made that pretty well known to Mom and Dad, and I remember when they rolled out *Enterprise*, I think I was at Patuxent River [Maryland] then, which is the Test Pilot School or the Flight Test Center. Dad called to tell me that he and Mom had driven up to Palmdale [California] to go see the roll-out. I said, "Why'd you drive all the way there to see that?" He said, "Because I knew some day you'd be flying them."

ROSS-NAZZAL: Your dad really was a big proponent and supporter of your dreams, wasn't he?

GIBSON: Yes, he was, and he was a big fan. Of course, I had to apply to the Navy, and the process was going to be NASA asks the Air Force, the Navy, the different services, to do a screening. The Air Force and the Navy were supposed to pick 45 pilots and 45 other-than pilots, and the Navy did that. The Navy picked 45 and 45. The Air Force was supposed to do that, and they didn't. They picked 75 pilots and 45 other-than pilots and sent all those names in. I had to get through the Navy selection board first, and that was just a paper selection. I didn't have to go interview or anything like that. That all worked, I got through the Navy selection board, and then NASA started interviewing for that the end of 1977. I remember Free Flight number 1 [of the *Enterprise*], whichever date that was on, I was there the very next week.

Free flight 1 happened on a Thursday or a Friday in September—pretty sure it was September—of '77, and my interview was the very next week because they had the big gathering in the Teague Auditorium. We got invited to go to it, the 20 pilots that were there interviewing that week. Fred [W.] Haise and [C.] Gordon Fullerton got up and told their story and showed their movies and all of that sort of thing. It was really cool. I got to go ride in the simulator with, golly, I guess it was with Fred Haise. What they were doing was they were wanting to compare the simulator with what they had actually seen on the first free flight. It was right after the first Free Flight, the week I got to be there.

Lo and behold, let's see, they interviewed 208 people altogether, 80 pilots and 120 mission specialists. January 16, 1978, I started the day just as Hoot Gibson, Navy test pilot, and by the end of the day, I was Hoot Gibson the astronaut. I remember I actually went in a little bit late that day because I was flying a test flight in the morning, and then in the afternoon, I was catching an airliner down to Orlando [Florida] to work with the Naval Training Center on the next upcoming F-14 simulator that was being put together. I was giving a ride to one of my

fellow test pilots, who lived about a block away from me. I picked him up, so I was a little bit later. I got to my office at, I don't know, about 8:30 in the morning, and there was one of those little yellow notes that said, "You were called by: Please call George [W.S.] Abbey." I went, "Oh, my gosh, this can't be."

ROSS-NAZZAL: You knew?

GIBSON: I was hoping that that's what it was, and I didn't know the protocol at the time. It turns out that what the protocol was, was that George Abbey would call all the ones who had been selected. If it was somebody else who called you who was a member of the selection board, it's because you didn't get selected. I didn't know that at that time, but I still have that note. I've kept that note. Picked up the phone and called George Abbey. George Abbey told me, "Well, if you're still interested, we'd like to go ahead and select you." I said, "Ba daba daba, if I'm still interested!" Of course I was.

ROSS-NAZZAL: Of course. Did you tell your parents as soon as you hung up the phone?

GIBSON: Oh, golly, yes. The instruction was, "Hey, the press release is going to go out later today, so please keep it quiet. Don't go write and tell your local newspaper or anything like that, but keep it quiet at least until the end of the day today," and I don't think I waited until the end of the day. I think I called Mom and Dad and told them but told them to keep it quiet, too. What a great day. Then I went and I flew about a 3-hour test flight in a Tomcat, landed from that, and let's see, myself and my back-seater who was on that project with me, we drove to, I don't

remember where, [Washington] Dulles [International] Airport [Sterling, Virginia] or Washington National [Airport, Arlington, Virginia], and flew down to Orlando and got to be in Florida by the end of the day. That was just a really fun day.

ROSS-NAZZAL: Pretty memorable, I'm sure.

GIBSON: Yes, that was a great day.

ROSS-NAZZAL: Then, a few weeks later, you were invited down here to Houston for basically a meet and greet, introduce you to the Center. Would you tell us about those three days down here?

GIBSON: Yes, the phone call was January 16, that's an easy day to remember, and then somebody from NASA—I don't remember exactly who—got on the phone, but said, "We'd like to have you all come down here." It was the end of January, as I remember. I don't remember the exact dates. We were down for about three days, and of course, they toured us around and the press was everywhere. It was just a real big event because we had not picked astronauts in nine years, and these were the first group of Space Shuttle astronauts, 35 of us, 15 pilots and 20 mission specialists. First time we had selected women, so we had our first six women astronauts, and first time we had picked African Americans. In that group was Fred [Frederick D.] Gregory, Guy [Guion S.] Bluford, and Ron [Ronald E.] McNair, and Ellison [S.] Onizuka. I remember a funny story, he was asked by one of the members of the press, "How does it feel to be one of the

first minority astronauts?" He said, "Minority? I didn't know I was one." That was Ellison. He and I were officemates for the first four and a half years that we were down here together.

ROSS-NAZZAL: Would you tell us about Ellison? Obviously we're not able to interview him. Rhea [Seddon] told us about some of the antics you guys were involved in.

GIBSON: Oh, golly, yes, did Rhea tell you about some of that?

ROSS-NAZZAL: A few things.

GIBSON: We had more fun at each other's expense. Shoot, I remember one time the *Roundup*, our little newspaper that came out every week, had a coloring contest. They put out a picture that kids were to color in. I took a bunch of crayons and went scribble, scribble, scribble, scribble, scribble, and then on the bottom of it, in very broken writing, wrote "El Onizuka," and stuck it up on the bulletin board up there at the Astronaut Office. Ellison found it and said something along the lines of, "Damn Hoot," and pulled it down, of course. He and I had a lot of funny little tricks and games that we played on each other all the time. One of the really funny ones that he played on me was I guess he got one of the secretaries to write a note that said, "You were called by: please call," and he gave me some woman's name in Bellingham, Washington. I'm going, "What in the world is this all about?" I returned the phone call. She got on the phone, and she had no idea what this was about, "Why do you have a message to call me?" "Well, I don't know, why did I have a message to call you?"

A couple days later, Ellison stuck up on our big bulletin board a newspaper article. This lady was entered in a mud-sliding contest, and I think she did real well in it because she was real big. She was a great, big, overweight woman from Bellingham, Washington. Ellison had tricked me into calling her and then put this up on our bulletin board. He and I were always playing little games on each other, little tricks on each other. The pictures you see of him, he's always got this, I don't know, almost mischievous smile on his face, but a very warm and captivating smile, and that's what he was like. I don't think I ever heard him mad at anybody or grumpy at anybody, just a wonderful, nice guy.

ROSS-NAZZAL: You mentioned the media interest in the Thirty-Five New Guys, and I was curious, some of the women have talked about the fact that the press was so interested in them because there had never been any women selected before, and of course, the minorities, as you pointed out. What did the rest of you guys think? The 25 guys who weren't unique, you kind of looked like the other guys.

GIBSON: We actually had it made. We had a bunch of briefings in those days, that we were back the end of January. They said, "We're going to make you guys available to the press." They had a whole day blocked out for us. The press was going to be able to come in. They'd take turns, and they'd get to have a private interview with you and all that sort of thing. The boys all sat around like this [demonstrates], saying, "Well, shoot. I guess we don't have to do anything." The women and the African Americans were tied up all day long, from early in the morning until 6:30 at night, and the rest of us just skated. They really weren't interested in talking to any of us. They said there might be hometown newspapers or hometown television stations that are there to

talk to you; none of that materialized. It was all the women and the minorities. It was fine with us, actually. Every time we went traveling—we reported, I guess, in June of '78, I think it was—when we would go on field trips, they would have the press in there to take pictures, of course, same thing. They were interested in shooting pictures of the women training and the African Americans training. Like I say, for the rest of us, that's okay. I get more than enough attention; I don't need all the attention when we're out training. In fact, that lets us just kind of slip by unnoticed. So didn't bother us at all.

ROSS-NAZZAL: What are your recollections of meeting Rhea for the first time? I know she talks about meeting you and Mike Coats and extending her hand, which was kind of unusual. Most women didn't do that.

GIBSON: That's what I remember. That's what I remember. In those days, that must be a different century—well, actually, it was a different century! It must have been a different era altogether because when you would meet a woman—even though I was a fighter pilot, I knew what the protocol was and how to be polite and how to do it properly—the protocol was you did not shake a woman's hand unless she held her hand out. That was what Rhea did immediately. I was being introduced to Rhea, and I will never forget her reaching her hand out to shake my hand. I certainly don't recall any of the other five women holding a hand out to shake my hand. Rhea, I believe, was the only one. I was very impressed with all six of them.

I knew to be selected out of 10,000 qualified applications for a mission specialist—for pilots, there were only 1,500 for the 1978 selection—there were 11,500 qualified applications, of which 10,000 were mission specialists, and that's because it's a little less restrictive. Mission

specialists could come from a whole lot of different backgrounds, but pilot astronauts had to have 1,500 hours of high-performance jet time. An airliner is not a high-performance jet, so it had to be jet fighter, jet attack kind of aircraft, and test pilot experience was highly desired, but in fact, it was required. We've never picked anybody to be a Shuttle pilot that wasn't a military test pilot. The six women were one of 10,000 that got selected, so we were very impressed with all of them.

ROSS-NAZZAL: Mike [Richard M.] Mullane talks in his book [*Riding Rockets: The Outrageous Tales of a Space Shuttle Astronaut*] about how he didn't really think that women should have been part of that class, that really they were kind of soft, especially when compared with the experiences you talked about, going to fly in Vietnam and things like that. Did you get that sense, being in the class yourself?

GIBSON: No, I didn't have that feeling at all. To this day I don't see any reason why women couldn't function in that environment. The only reason they didn't before was because they didn't. President [Dwight D.] Eisenhower made the decision back in the early days, when we were getting ready to think about sending astronauts to space and there was talk about who should we send. "Well, maybe we should send condemned criminals, that way, if we kill them, they were condemned anyway." There were all kinds of fanciful ideas about who we should send and who we could send, and President Eisenhower made the decision, no, we were going to select from the ranks of military test pilots. That's kind of the way it got started, and it stayed that way for a long, long time, obviously. It wasn't up until late in the game that we picked a group of scientist astronauts. They had all been military test pilots prior to that point. It was a

natural evolution, although at the time, when you look at it, we had the requirement and still do, to this day, that it had to be a college degree in engineering, science, or math. There weren't that many women that were in technical degrees at that time, and it, I'm sure, was a whole lot more effort for that selection board to find enough women with the technical degrees that we could interview and could pick. It's evolved over the years. I was on three selection boards altogether, two of them when I was Chief Astronaut because the Chief Astronaut was always going to be part of the selection board. Rhea and I were on a selection board together, maybe for the '92 class or maybe the '90 class.

ROSS-NAZZAL: Was it when you selected Eileen [M.] Collins? Were you on that board?

GIBSON: No, I was not on that one. She was '90 class, wasn't she?

ROSS-NAZZAL: Yes.

GIBSON: Yes, she was in the '90 class. Maybe it was after that one; it might have been the '92 class. I still remember we just didn't have that many women to choose from that met the criteria of qualified, let alone pilot-qualified. We've seen that change dramatically over the years and I fully expect our Astronaut Corps is eventually going to get to the point where it's 50-50 men and women. I know they're not there yet, but I think it will be. No reason not to be.

ROSS-NAZZAL: Yes, the recent class, it was 50-50. That was big news.

GIBSON: That's right.

ROSS-NAZZAL: Tell me a little bit more about some of the other women in the class, Judy [Judith A. Resnik] or Sally [K. Ride], Kathy [Kathryn D. Sullivan], some of your initial thoughts about some of those women.

GIBSON: Judy was beautiful, just gorgeous, and really smart, really driven, really a hard-charger. Judy frequently was going to speak her mind, and sometimes annoyed some people because if Judy had something to say, you were going to hear it. And let's face it, she was generally always correct. She was generally always right on, but very forceful, very driven, and very competent. Golly I flew with her a whole bunch of times in the T-38s, and she loved what she was doing. Really loved being an astronaut, loved flying the airplanes, loved going cross-country and doing all of those things.

Sally was very much like Judy. They were very much the same sort of women, both very driven. I had pretty well pegged Sally and Judy as being the first two that were going to fly. Not necessarily in that order—I didn't know which order it was going to be—but they were the two that really showed up in all of the training and all of the working, and worked on some of the more visible things, which did make them show up a whole lot better and made them a whole lot more visible. Very much the same. I actually dated Sally for a while.

ROSS-NAZZAL: Did you really? I didn't know that.

GIBSON: Yes, she and I were partners for a while there, before I got tied up with Rhea. Sally was just a wonderful lady, just really, a wonderful lady, just a whole lot of fun. Easily as smart as Judy, easily as capable, whole lot more diplomatic in terms of how she would say things, or when or where she would say things, and a little bit shy. Just a little bit shy. Both of them didn't really enjoy all the press attention. I think Sally because there was a certain amount of what I think was shyness in her; Judy because she just didn't like it, so a little bit different reasons but they both somewhat tried to shun the press. And, they're just not going to be able to shun the press.

Shannon [W. Lucid] was the one of the original six women that had a bunch of flying time. In fact, I think she had, like, 1,400 hours of flying time. I'm trying to think if there was a quote somewhere that Shannon had more flight time than one of our pilots. Now that I've said that, I don't think it would have been one of our pilot astronauts, but maybe one of our pilots out at Ellington [Field, Houston, Texas], or something along those lines. Shannon was the matronly one, of course, in our group. Shannon's the only one that had kids. Let's see, of the first six women, only two of them were married, Anna [L.] Fisher and Shannon were the only two that were married. Shannon was good old country girl from Enid, Oklahoma, and talked like a country girl. Very smart. Ph.D. in chemical engineering, or something along those lines, something in the area of chemical research or somewhere in there. Very smart, very smart lady, and I worked with her in SAIL, the Shuttle Avionics Integration Laboratory. Shannon was in about the third or fourth group of Shuttle astronauts that got assigned to work over there. I was in the second group. Very competent and very down to Earth, really down to Earth.

Kathy Sullivan—Kathy, you sometimes wondered if she couldn't press more weight than you could in the gym. She wasn't petite, but she was athletic. She got out there and ran, and

Kathy was very sharp as well. All six of them had to be very sharp, or we wouldn't have picked them out of that kind of a competition. Joined the Corps and fit right in. I flew chase on STS-2; Joe [Henry] Engle and Dick [Richard H.] Truly were the pilots on STS-2. Kathy was in my backseat. I was Chase-1 for STS-2, so I'm the T-38 that joined right up next to *Columbia* for the second landing, and Kathy was my constant companion in that. She had the camera and took one of the most gorgeous photos to come out of the chase program, and it was the underside of *Columbia* with the blue sky and some wispy clouds up above it. You really can't see the top side of it all, but just a gorgeous photograph. A very sharp cookie, just really good.

Anna was another MD, and it was funny that she was picked in '78 and her husband, Bill [William F.] Fisher, was not picked in 1978. The debrief to him was, "You didn't have quite enough technical background," so he went out and got a master's degree in mechanical engineering and then got picked up in the 1980 class. They were the first American husband and wife couple, because I didn't marry until 1981. So, they were there in 1980. Anna was very shy as well, although very good at public speaking, very dynamic, but seemed always to be very quiet and very reserved. I didn't work with Anna quite as much as I did with the other women in that group, but very smart, very sharp, fit right in as well. There's one left. I can't think of her. I'm trying to remember, who's the other one?

ROSS-NAZZAL: The one who had that Corvette?

GIBSON: Yes! Yes, that's right, her! Yes, right. I was very impressed with Rhea right off the bat. As a surgeon—I believe this may still be true; at least it was true for a number of years when we were there—she was the only doctor astronaut that we had ever picked who was

beyond being an intern. All the other astronaut doctors that we picked were in their internship and were just about to finish or had just finished their internship. She had completed three years of surgery residency, so of course I may be biased, but Rhea was by far the most accomplished doctor astronaut that we had ever picked. She wasn't as nutty as Story Musgrave, for example, who would make anybody feel lazy, looking at him with four master's degrees and one or two Ph.D.s and a doctor of medicine as well. Story definitely had accomplished a whole lot, but I believe it's even true that even he was just finishing an internship when he was selected. So Rhea had the most actual doctor experience, and of the two, if you were going to say—okay, something we probably don't say anymore—who are the two that were the most feminine and the most ladylike, it would be Anna and Rhea. Rhea, just gorgeous and very polished, very polite, although you cross her or you say the wrong thing and she'll politely tell you to go.... I guess we got together early in 1979, I guess, is when we started dating, and then it was three years later, in 1981, that she asked me to marry her.

ROSS-NAZZAL: She asked you?

GIBSON: No, I say that all the time. She just loves it when I do that, but no, I asked her. We married May 30, 1981. She wanted us to wait until after STS-1 had happened, which was April 12 of '81, and so then, at that point, we announced that we were going to be married on May 30. There have been a number of husband and wife astronaut couples here in the US. Most of them are not still married. Tammy [Tamara E.] Jernigan and Jeff [Peter J.K.] Wisoff are still married, but Rhea and I are [one of a select few].

ROSS-NAZZAL: I think Steven and Linda, Steve [Steven R.] Nagel and Linda [M.] Godwin are still around.

GIBSON: Yes, Steve and Linda are still married, so that's good, but a number of the other ones are not still married. I always say it's because I am so easygoing and easy to get along with that we have stayed together for so long. Of course, she makes a funny comment.

ROSS-NAZZAL: I did want to ask you, your class called themselves The Thirty-Five New Guys. Do you think that the women felt that they were part of the guys, or the men thought the women were just one of the guys and part of the gang, or do you think that there was some separation between the two?

GIBSON: I think I called them guys, too, and I considered them one of the guys. I believe they considered themselves one of the guys. I never heard any of them say, "We don't want to be called guys; we don't want to be called The Thirty-Five New Guys." Never did hear that. I suppose it's possible, but it would surprise me. Actually, it would surprise me to hear of any of them saying, "Well, I object to being called guys." Never have heard that.

ROSS-NAZZAL: This was the first time, I'm assuming, that you worked with a lot of professional women, being in the Navy. Is that the case?

GIBSON: Absolutely. The military did not have that many women back in those days, which is why Mullane's comment is kind of interesting. He felt they were too soft; he felt they didn't fit

in, they wouldn't be able to do the job, etc, or whatever it was he said. I hope I'm not putting words in his mouth. The question that came up when you were telling me that was, "Mullane, how would you know?" There weren't that many women in the Air Force—certainly not in the circles that we ran around. There weren't that many women in the Navy that I had ever encountered, just because it was years and years before women were allowed to serve in combat roles and be in combat squadrons aboard combat ships, so there weren't any women on aircraft carriers the whole time I was active in the Navy. The only times you saw women—we had Navy nurses at the hospitals. In the training squadrons, towards the end of the time that I was there at San Diego, we were starting to get women in the RAG squadrons. The F-14 Tomcat Training Squadron, the F-4 Phantom Training Squadron, we started to get some Navy women in those, but it was really rare.

Mullane wouldn't have had any real experience working with women and having anything to judge that and say, "No, they're too soft, they can't do this." Yes, it was a change. I remember when we started flying the T-38s; we, of course, trained the mission specialist to make the radio calls. Hearing a female voice on the radio in 1978 was unusual. There weren't that many. If there were any airline pilots at that point, there sure weren't many, so you just never heard female voices on the radio. We'd go cross-country in the T-38s and Sally would be making radio calls, or Rhea'd be making radio calls, and sometimes somebody would come up and say, "What is this? Who is this flying?" There weren't that many women in aviation jobs at the time, either. That has changed a lot over the years, too.

ROSS-NAZZAL: Was that challenging for you, in terms of when you were working with them, say, in the T-38s, should you carry their bag, do you need to help them up into the aircraft? Were there some of those kind of conversations going on?

GIBSON: I don't know that we talked about it too much, and I don't remember ever carrying a helmet bag, for example, for any of the women. It was just standard that you'd pick up your parachute out of the parachute room and you'd sling it over one shoulder. The women would just do that themselves. I would, when we got to the airplane, usually take her parachute—whoever "her" was—and take it up in the airplane and connect it to the airplane myself. I would usually do that because they were bulky and they were heavy. I don't think any of the women ever told me, "Get your dirty paws off my parachute, boy," or anything like that. The only thing I remember is one day, we were going over to Building 1 or something, and one of the boys grabbed the door and opened the door for Sally, and Sally shoved him through the door and held the door herself. She was smiling when she did it and was being funny about it when she did it. That's the only time that I saw anything that would be, "Knock it off, you chauvinist pig," or anything like that.

ROSS-NAZZAL: She definitely made her point, didn't she?

GIBSON: Yes.

ROSS-NAZZAL: You guys reported in the summer of '78: where did you end up living here, for the first couple of years in Clear Lake?

GIBSON: I bought a house in Nassau Bay, just right over here—1907 Back Bay Court. It was on a cul-de-sac, and there were three houses in the cul-de-sac, and right next to me was Owen [K.] Garriott, and right next to him, on the other side, was Joe Engle. So this was Astronaut Cul-de-Sac, is what this was. That was '78. Then Rhea and I married in 1981. She really didn't like that house, and so immediately, she set about looking for another house. That had been Al [Alfred M.] Worden's house originally, the house that I was living in. Rhea set about looking for another house, and she found another house that was two and a half times as expensive and that had been Rusty [Russell L.] Schweickart's house, originally. We sold my house and bought that house. At the time, it was owned by Craig [L.] Fischer, who was one of our NASA flight surgeon docs here. He was selling it because he had a teenage daughter who was having a lot of trouble with asthma here in Houston. The doctors said, "You're going to have to get her out of here," so he went and moved the whole family to Palm Springs [California]. He hated to leave. We bought his house.

That was a waterfront house over on, I guess it's called Cow Bayou, which is just off of Clear Creek. If you had a boat, we had a friend that kept his boat behind our house—we had 100 feet of bulkhead out behind the house—kept his 30-foot cabin cruiser back there. We could sail down Clear Creek and through Clear Lake and out into Galveston Bay from our house. That was the house that Rhea wanted, and so we lived in that one for 14 years. We actually moved into the house while Rhea was in the hospital with Paul, giving birth to Paul, which was July of '82. She left for the hospital from the house on Back Bay Court and by the time she came home, we had moved into the other house, on Barbuda Lane.

ROSS-NAZZAL: Did you have all your astronaut colleagues help you move?

GIBSON: The astronauts moved us, yes. It was Ace Moving Company.

ROSS-NAZZAL: That's what I was thinking; I couldn't remember.

GIBSON: The Ace Moving Company is what we were known as. When somebody would be moving, the word would go out, "Hey, so-and-so is going to move on Saturday; everybody show up that can help." You'd have 25 astronauts show up to help move. Usually, it happened in about three or four hours, you'd move a whole entire house. They helped us move.

ROSS-NAZZAL: Very nice. I'm guessing more showed up since Rhea was in the hospital, right?

GIBSON: Yes. She had a difficult time with that one, and after something like 14 hours of labor, they said, "This isn't going to work; we're going to have to do a c-section." They did a c-section and then baby Paul, when he was born, had lung difficulties, serious lung difficulties, and got Life Flight-ed up to Hermann Hospital [Houston, Texas]. Altogether, I don't remember what day she went into the hospital, but [it] was like a week before she finally got released. He was touch and go for about three days, and we weren't sure that he was going to stay until about the third day. That was kind of traumatic.

ROSS-NAZZAL: That's scary. But he's doing well—I think I met him when we were out interviewing Rhea a few years ago, in Murfreesboro [Tennessee].

GIBSON: Yes, he's done fine. He's graduated from college now and working as a waiter in an Italian restaurant, as a college graduate, still looking for that career, but yes, he's done well.

ROSS-NAZZAL: It's a tough market these days.

GIBSON: Yes, it sure is.

ROSS-NAZZAL: Tell us about those first few days when you came down here to Houston, being part of that Astronaut Corps, going to that first Monday meeting, and being introduced to your colleagues.

GIBSON: Part of it was kind of traumatic for us military guys because you had to decide what to wear. Previously, you got up and you got showered and shaved and dressed and you put on your uniform and you went to work. I think Mullane talks about that in his book. He didn't know how to dress or what to dress, and Donna had to take him to the store and pick out some clothes for him. All of a sudden, you had to have clothes, and none of us had any of that.

I will never forget, I studied the pictures of the 35 of us before I showed up so that I'd know who it was, because we had only just met them for that one or two days back in January. Now it's June, and I showed up at Building 4. Of course first had to go through the badge office and get my badge, and parked in the old Building 4 [parking lot]—now it's called 4-South; it used to be Building 4—and walked upstairs and went up the stairs, opened the door and stepped into the hallway, and there was Dick [Francis R.] Scobee and Judy Resnik. [They] were the first

two that I saw. Of course, the two of them would die on *Challenger* [STS-51L]. They were the first two that I saw, and walked up to them and I said, "Oh, my gosh, it's Scobee and Resnik," and shook their hands. I don't remember a whole lot about the rest of that day. I guess the rest of that was finding out where my office was going to be.

Ellison and I got put in one of the few interior rooms that didn't have a window. Everybody else had a window. I think there were only two offices that were on this internal wall over by what was Rick [Richard W.] Nygren's office, so we didn't have a window. It was Ellison and me in one, and then the other one, I want to say, was Mike Coats and maybe somebody else. I'm not sure about that, but I think that's what I found out the first day, was where my office was and that Ellison and I were going to be officemates. When the '80 class came in, we got Woody [Sherwood C.] Spring in addition in there, in our office. Ellison and I were in that office together all the way up until he got assigned to STS-10. It was supposed to be the 10th mission to launch. What we always did was when you got assigned to a crew, you moved into a crew office. I guess on a five-person crew, it was three in one office and two in another office, right next to each other. We were constantly moving offices around. Every time we'd have another crew selection, they'd put out a new office assignment list, and you'd have to move. As I remember, it was four and a half years that Ellison got assigned to STS-10 and moved from that office. I, at some point after that, got assigned to the next mission, STS-11, which turned into [STS]-41B. When we were first assigned, it was STS-11. At that point, I moved out of that office and actually got an office with a window.

ROSS-NAZZAL: Got an upgrade all of a sudden?

GIBSON: Yes.

ROSS-NAZZAL: I understand you guys participated in quite a bit of training. You were supposed to go through a two-year training period, and it ended up being about a one-year period. Would you talk about that?

GIBSON: Yes, we really did, we did a lot of training. A lot of it was just a bunch of really fun stuff that you always said, "Golly, if I get the time, I'd like to go study geology." If I got the time, I'd like to go study oceanography, astronomy, and all of those things. We were training on all those subjects, and they would bring some of the world's experts in to brief us on those things. A lot of our classes, a lot of our briefings with the scientists and people like that, were over here in the Lunar Planetary Institute, right down there on the water. That was always a lot of fun, going there, because that was such a gorgeous place to be training in. Somebody recently sent me a photograph of our whole class in the LPI, in one of those great, big, beautiful rooms that they had in there for training in, with marble floors and all that. We went around to all the different NASA Centers. We went down to the Cape [Canaveral, Florida]. Somebody just sent me a picture of that, too. I know who it was; Nick Thomas from Astronaut Encounter, down at the KSC Visitors Center, sent two of those pictures from, I think that was 1978.

We went to JPL [Jet Propulsion Laboratory, Pasadena, California], and that was an interesting visit. We got to JPL and the Center Director briefed us—and I don't remember who it was right now. He basically told us that he didn't believe that we needed manned space at all. Talk about what I think nowadays would be considered an inappropriate subject when you're speaking to a bunch of manned space people. It'd be like me going there and telling him that we

didn't need robots for anything. We did get to see a bunch of fascinating things, but I'll just never forget the director getting up and telling us that, you know, "We really didn't need you guys; we really don't need manned space." It's okay to feel that way, but just don't say it! We went there; we went to Ames [Research Center, Moffett Field, California], of course, and visited up there. We went to all the NASA Centers, came down to Huntsville [Alabama] and visited Marshall [Space Flight Center]. I think we went up to Goddard [Space Flight Center, Greenbelt, Maryland] as well and visited all of those places.

Of course, we were being trained on Space Shuttle systems and Space Shuttle flight dynamics, although not deeply into it. The training organization over at JSC was pretty heavily involved in training for the first four STS flights. Of course, you just had two-person crews, so each of those two guys on those first four flights had to learn everything. They had to learn how to do spacewalks, they had to be able to go outside and winch the doors closed, if you couldn't close the doors electrically.

We weren't seeing much at all in the way of simulator training. At that time, I think we had the second simulator, what we called the mission simulator. We had the motion based, and then the mission simulator also got called the fixed base simulator. I think that one came on a little later, so we really weren't doing a whole lot of training in the simulators. They brought us in when they did, I've been told, because they believed we were within six months of the first launch, and it actually turned out to be almost three years. We didn't train a whole lot after our initial training. I think after our first year they really didn't know what to do with us at that point, and so they said, "Okay, rather than being astronaut candidates for two years, you're hereby astronaut candidates for just one year. As of today, you're astronauts, and not astronaut candidates." We all picked up work assignments. After three months, after six months—pick a

date, something like that—there was some amount of time when we were just pretty much indoctrination and training on what NASA was all about and all of that.

After that, we started picking up jobs in the office. I worked initially as support crew for STS-3, which was going to be Jack [R.] Lousma as the pilot and Fred [W.] Haise as the commander, just the two of them, and they were going to do the Skylab re-boost. They were going to go rendezvous on Skylab on just the third Shuttle flight. They had this thing called the TRS, Teleoperator Retrieval System, and it was going to fly over and dock to the Skylab. It was a booster rocket, so it was going to boost Skylab up higher so that it wouldn't reenter. Skylab came down in 1979 and we hadn't launched yet, so they never did do the Skylab re-boost.

At some point after that, I got assigned to work in SAIL. As I mentioned earlier, I was in the second group of astronauts that went over to SAIL. George did things like this; George Abbey would just get that camel's nose under the tent and then take over the whole thing. Initially he had sent Brewster Shaw and John [O.] Creighton over to SAIL to help out and to fill in and to do some of the testing. Only George remembered how back in the Apollo days, the astronauts did all of the software testing in the certification lab, whatever it was back then. George wanted the astronauts to be the ones that flew the SAIL simulators and flew the simulated missions and verified all the software. George was relentless, and there was a lot of resistance to it, and George prevailed, as he usually does.

We had a second slug of astronauts that got assigned. Don Williams, myself, Story Musgrave, six or eight of us, something like that, were in the second group of astronauts. Later on, in 1980, we brought in some of the '80 astronauts. I believe they were doing that all the way up until the end, where the astronauts were flying all the missions in the SAIL lab. That was actually extremely valuable because you really got to know the computer system and the

software system and I think some of the better astronauts at operating the software in the Shuttle itself had been the guys and gals that worked over in SAIL because you didn't need a checklist to bring up a computer. You knew how to do it by memory because you did so much of it over there. So, that was really, really valuable training.

I would come up with questions from flying some of the sims over there, and I'd go ask one of the engineers over there in SAIL. For example, I remember one time talking about the three inertial platforms, which are attitude reference and all of our velocity sensing, acceleration sensing. We had three platforms, and you'd look at it in the computer and they were at all these different angles. I did not understand why. Why are they at different angles? What in the world is that all about? I remember going and talking to one of the engineers and I said, "Okay, show me what they look like. What do they actually look like?" He said, "Okay, well, you know where they are, they're up in the nose of the Orbiter, they're on the navigation platform that's up there in front of the crew cabin. One of them sits like this, one of them sits like this, and the other one sits like that," and they all had accelerometers mounted on them. For me, it was valuable just to know, okay, this bunch of angles that makes no sense to you means this, this bunch of angles means this, and this bunch means this.

That was what could be so valuable about working in that place. I kept a great big green notebook—and I've still got it, I still have that notebook where I'd take notes in it when I was talking to somebody, and write down what the values would be for certain things and write myself examples of how things worked. It was just a really, really great learning experience to work over in the SAIL. You would walk out of there at 10 o'clock at night sometimes and you'd say, "Boy, today was a complete waste." Other times, you'd walk out of there at 11:30 at night and say, "This is the best job in the whole place." Didn't seem like there were many in-

betweens, it was either one or the other, but most of the time it was, "I sure like working over here." That was a really good assignment.

ROSS-NAZZAL: I also understand you did a lot of work with T.K. [Thomas K.] Mattingly.

GIBSON: Yes, T.K. could be very challenging to work for. Rhea must have put you up to this. T.K. was our supervisor when I worked in SAIL. Every week, on Monday, we would have to report in to T.K. He was in charge of an area called, I want to say, development. I'm not sure it was called development or technology or what it was, but he was the big boss that the astronauts that worked down at Cape Canaveral, what we called the VITT team, Vehicle Integration Test Team, reported to. All of us that worked in SAIL reported to him, and then he had I don't know what else, probably the guys that worked out in Downey [California] at the Flight Software Lab, Flight Computer Lab, FCL?

ROSS-NAZZAL: FSL [Flight Systems Laboratory], I think.

GIBSON: I think it was called FCL. I don't remember what it stood for, but anyway, the guys that worked in those areas that were developing, basically, the procedures and actually developing the vehicle for STS-1 all reported to T.K. I also got to work for a while as one of the Cape Crusaders. I'm sure you've heard of the Cape Crusaders, that was the astronauts that worked with the VITT team down at the Cape and actually took part in the testing and the verification, getting a vehicle ready to go, leading up to, in my case, STS-1. I worked that part-

time as well. That was always interesting, to get down to the Cape and be in the actual vehicle, in *Columbia*, doing some of the testing leading up to first flight.

T.K. could be extremely demanding. What do I mean, could be extremely demanding? It seemed like no amount of data was ever enough. We would go in to report to him and all of us that were available on the SAIL team were supposed to go in for the meeting with him. It'd be T.K. and it'd be about five or six of us that would show up. We would bring the log book in, and early in the game we thought we would just give him a brief synopsis, a brief report, of what we had done the previous week, what kind of testing we had done. He would start asking questions, and you wouldn't always know the answer to his questions, so he'd assign you an action item.

You'd come out of that meeting with a list of 15 action items, and everybody would have their own little list of 12 or 15 or 10 action items that you had to do, because we didn't tie up his time well enough. We figured out, finally, we have got to filibuster him or else we are going to keep getting assigned action items. So we would go in there and we would read him the log book from the previous week. We would just read it because as long as we were talking, he couldn't be assigning action items. We would literally look at his schedule, figure out how much time he had. "He's got two hours today. Okay, we're going to have to filibuster for two hours." It worked. We would get to the end of it, he'd look at his watch, and he'd go, "Guys, hey, this is interesting, but I'm out of time. I've got to go to"—and we'd go, "Oh, okay." We finally figured that out, but probably what Rhea told you about was that at one point, while I was working in SAIL and had other job assignments and other things, T.K. called me into his office one day. He said, "There's an area that I'm concerned about, and that's external tank separation and solid rocket booster separation. I don't know if it's robust enough, and I want you to go

investigate it. Why don't you come back in a week, because I don't know exactly what it is I want. Why don't you come back in a week and tell me what it is I want."

I thought, "Well, okay, all right." I went out and I studied stuff for a while and I thought about it and I looked in some of the documentation. I came back to T.K. in about a week, all ready to go to work, and I said, "Okay, here's what I think I need to do. I need to go look at all the wind tunnel testing that was done of solid rocket booster separation." You're still up in the atmosphere at that point, very much so in the atmosphere. We're going 3,000 miles an hour and we're going to separate the solid rocket boosters and they've both got to separate. "So the software that goes into that and all of the dynamics from the wind tunnels that tell us that yes, we can do this. I'm going to go look into all the wind tunnel testing. I'm going to go look at all the hardware design and the hardware testing that's gone into it and the verification effort that's gone into it. I'll go do that for the solid rocket boosters, and I'll go do that for the external tank." That's what I did. I met the subsystem managers. Mark [K.] Craig was the subsystem manager for which one? Barney [B.] Roberts was the other one, the subsystem manager. I think he was solid rocket boosters, and Mark Craig was the external tank manager for that part of it. I must have tied those guys up for, shoot, half a day for two weeks each, something like that, just getting their take on things and what had gone before.

I went out to California, to Downey, to go look at the separation testing that was being done for the external tank, because that was associated with the Orbiter. I went and looked at hardware and looked at how they had done the actual firing of the explosive bolts out there. I, after about two months or so of intense research, had a book this thick full of stuff. I went back to T.K. to deliver him my final report, and guess what? I walked out of there with three pages of things for me to go do in addition. I went back to work, and I went all through those three pages

of things and addressed every single one of his questions or his comments. "What about this, what about that," and spent another month and a half or two doing that. Thought, "Okay, this is the end of it this time." I went back to T.K., and guess what happened? The same exact thing happened. I walked out of his office with another two-page thing, and I finally said to myself, "Okay, I see this is a never-ending job, so I'm just through with it." I didn't do anything else on it, and he never called me on it, never called me back. I think maybe what happened was about this time, he got assigned to STS-4. Might have been what saved me, was that he got assigned to where he had to start training, and he moved off of that job.

In the course of it, I sure learned a lot about external tank separation and about solid rocket booster separation. I think I've got a copy of the SODB, the Shuttle Operational Data Book, and it had all those results of the wind tunnel testing and all the runs that were made. I wound up learning a whole heck of a lot from it. It's just that there was never going to be a finish line on that little project.

ROSS-NAZZAL: You could never have the exact right answer for him.

GIBSON: Yes, it would never be finished. He was never going to say, "All right, good, I think I'm happy with it, nice job." I don't think that was ever going to occur.

ROSS-NAZZAL: You mentioned you were working at SAIL; you were doing this work for T.K. Mattingly. Would you talk about what your work hours were like at this point? Were you working every day? Were you working 9:00 to 5:00?

GIBSON: With SAIL, it varied. I'm trying to remember now what the hours were. SAIL was a three-shift operation. They were working around the clock. We wouldn't necessarily be there for the midnight to 8:00 AM shift, and so I guess the shifts were 8:00 until 4:00, 4:00 until midnight, and then midnight until 8:00, I guess, were the three shifts. Generally, we were working first shift and second shift, and so we would always have at least one astronaut over there, although we had different jobs. One job that we had to do was to review all the test procedures that would get printed, and virtually every day in our in-basket there would show up what was called TCPs, Test and Checkout Procedures. So one astronaut would be assigned TCP review for the whole week. It was your job to get over there, and sometimes it could be a mountain of paper that was in that inbox. You had to go through and review it for accuracy. We always wound up making little changes to it and corrections to it. That would be one of the jobs that was over there.

There would be meetings. I think another astronaut would be assigned to the TCP review meetings, because they would get together when they had one and everybody would provide their inputs to it, and then from there, it would go to a final TCP. Then, you could run it in the simulator. The really wonderful thing about the SAIL lab was that it wasn't simulated equipment, it was real hardware. You had the real Space Shuttle computers, you had real rate gyros, you had real accelerometers. You even had the cable trays, so you had the cables that ran from the nose section of the Orbiter. We had an Orbiter cargo bay with all the electrical wires and things running back to the aft avionics compartment as well, which is where a lot of the electronics that controlled the main engines and the fuel lines and a lot of stuff that was back there in the back would be located back there. We wanted to have all the cable lengths because

that can make a difference in the electric signals getting through. It was a fascinating place to work, but sometimes we had to support three-shift operation.

We had two test stations: we had the STS and the GTS test station. The GTS stood for GN&C [Guidance, Navigation, and Control] Test Station, and the STS stood for Shuttle Test Station, I guess. That was the whole length simulator, was the STS. The GTS was basically just a cockpit, but it still had real, genuine Shuttle equipment. It wasn't as high fidelity an instrument panel, so some of it was simulated instruments that was in the GTS, but we had to support testing in both of those. You'd have two astronauts assigned during first shift and two astronauts assigned during second shift to support that testing. Some days you'd come in at 3 o'clock and work until midnight. I remember, before STS-1, we had a backlog. We were behind on our testing, and we were not going to be finishing the certification testing in time for first flight. The head of SAIL at the time, who was Mr. [Thomas V.] Chambers, said, "Okay, guys, we're going to go around the clock until we knock down this backlog." We went for six or seven days straight. Sometimes we worked over the weekends, if we were a little bit behind.

We were not restricted to 40 hours a week. I remember Story Musgrave was our lead astronaut over in SAIL at the time. We had to knock this backlog out of our way, and that's what was declared, we were running two shifts, two 12-hour shifts, two shifts a day. I guess it was 8:00 until 8:00, and then 8:00 until 8:00 were the two shifts. I remember I drew the 8:00 PM to 8:00 AM shift for the first week, and we went nonstop. We were knocking off three and four tests a shift. We did drive that backlog down and succeed in certifying it.

The hours could be really extreme sometimes, so you could go a whole week and never see Building 4. You'd be over in Building 16 the whole entire week. Again, you sure learned an awful lot. I think Story threw himself in there for the 8:00 AM to 8:00 PM shift for the whole

first week. I think we succeeded in one week of getting where we wanted to go, so we could back to just two shifts a day. SAIL would run the third shift, but usually what they were running was ground processing software, and we had no input on that. They didn't need an astronaut in the cockpit while they were running the software that they use in the computers down at Cape Canaveral, but they would use the SAIL for verifying all of that as well. Those were some of the sorts of hours that we got to do.

ROSS-NAZZAL: Long days.

GIBSON: You got to do some long days, yes, some really long days. I mentioned chase, earlier. I was a chase pilot for STS-1 and STS-2. I was Chase-4 on STS-1, so when *Columbia* launched with John [W.] Young and Bob [Robert L.] Crippen on April 12, I was actually sitting in El Paso [Texas]. I was Chase-4, so it was Chase-3 and Chase-4 that were in El Paso. White Sands [Northrup Strip, New Mexico] was the abort once-around strip, if they had had a problem that required an AOA, Abort Once-Around. Dave [David M.] Walker was Chase-3, so he was lead, and I was Chase-4. I had the TV cameraman in the back seat, and so, we were sitting in El Paso, watching the launch. If they had declared an AOA, we would have hopped right in our T-38s and gotten right up on station over White Sands to chase them when they came back in. As soon as they got to MECO, Main Engine Cutoff, we knew that they weren't going abort once-around. We hopped in our airplanes and flew to Edwards [Air Force Base, California] to be in place to cover them, just in case they had to land on the first three or four orbits. Jon [A.] McBride and Dickie [Richard E.] Gray were down at Cape Canaveral for the launch, to chase them if they had to do an RTLS, Return to Launch Site, so then I wound up staying at Edwards.

It was only a two-day mission, so we were at Edwards for two days. I was airborne over the alternate runway aim point, and Jon McBride and Dick Gray got to chase STS-1 when it came down to land. Then I was Chase-1 for STS-2, so I did what they did. I was down at the Cape for launch and then made my way out to Edwards. It was supposed to be a five-day mission. We were really looking forward to five days out at Edwards because we would have been on alert during the crew's awake time. When the crew went to bed for the night, we weren't going to be on alert anymore, so we didn't have to hang around out at the flight line. We were going to have a great time running because Edwards is a great place to go running. We were going to get to enjoy the gym and go running and all of those great things, and they had a fuel cell failure, and they came down in two days. I only got to enjoy Edwards for two days, once again.

ROSS-NAZZAL: I've heard that the chase teams were referred to as the Chase Air Force. You guys had a patch and things, do you recall that?

GIBSON: Yes, we did have a patch. In fact, I still have one of my jackets that has a patch that Dick Gray actually developed. It has a T-38 joined up on a Shuttle, and it was Shuttle Chase Team is what it says on the patch. I still have my jacket that had that patch on it. We got a little bit notorious on STS-1 because Jon McBride and Dave Walker really liked to be off practicing chase, so we did a lot of it. Since we were support for the upcoming mission, we had the highest priority for getting T-38s, and we wound up doing probably a whole lot more flying than we needed to. In the post-landing party after STS-1, we had a big party, all the astronauts, and it was basically to roast John Young and Crippen over the whole thing, but the chase team got

royally roasted by the rest of the office. It would be, "So, here was the development: John Young and Bob Crippen are training for their mission, and here they are in the simulator, and meanwhile, the chase team is getting ready to go," and it'd be a flight of 15 bombers that they'd show a picture of. Then they'd go back to something else and roast the crew and roast somebody else in the office, and they'd say, "Meanwhile, the chase team was down at Cape Canaveral," and there'd be this field full of airplanes, 1,000 airplanes in this picture.

We got really hammered by the office and because we did so much practicing, we had over-flown our T-38 budget, we the pilots, the individual pilots, all four of whom were Navy pilots. It was Jon McBride, Dick Gray—former Navy—Dave Walker, and myself, were Chase-1, 2, 3, and 4. All former Navy, and we got beat up. In fact, George Abbey sent out a note to all of us that said, "You guys are walking until you make your time for the six months come out to your allocated flight time," which was normally 15 hours a month of T-38 time. I think because we were mission support for STS-1, we could have 20 hours a month. We over-flew that. We went well beyond our 20 hours a month, so he sent us out a memo that said, "All of you boys are walking," basically. "Make your time for the six months come out to" six months times whatever our number of hours was supposed to be. I think I was the only one that actually abided by that. I think the rest of the boys said, "Ah, phooey, I'm not doing that." I think I was the only one that did that.

When it came time for STS-2, my wingman, Chase-2, was Ken [Kenneth J.] Baker, who was former Navy, but the other guys were Air Force, Dick [Richard O.] Covey and Loren [J.] Shriver were the other pilots. I was the only one who had been on the Chase-1 team, so of course, my job was to train those guys and teach them how to do it. I was determined that we were not going to over-fly our flight time, and so I made up a big matrix from the time we were

assigned until the time of STS-2. How much training time we needed and how many trips down to the Cape, how many trips out to White Sands, how many trips out to Edwards we needed, and made up just a whole budget and put that out to the whole team. "Okay, here's going to be our plan." We actually did it without exceeding our flight time, so I got big points with George for pulling that off.

ROSS-NAZZAL: I'm sure you did.

GIBSON: I kind of messed up Dick Covey. It just didn't even occur to me, but in my first meeting with George, when George said, "Come over and let's talk about Chase," I had that all put together and went over and showed it to him. Then George appointed Dick Covey to be Chase-1 for STS-3, and same thing, George called over to Covey and said, "All right, come on over and let's talk about Chase." Covey went over there and he didn't have that. He came back and he said, "Oh, George told me when you came over, you had a whole detailed plan of how many sorties each guy was going to get, and how many rendezvous each guy was going to get, and you didn't tell me about that." It just hadn't occurred to me, but I kind of screwed him because I was so organized and ready for the whole thing and he wasn't.

ROSS-NAZZAL: You think that's why he was the last to fly in class? No, I'm just teasing.

GIBSON: I'm trying to think, was he our last pilot to fly?

ROSS-NAZZAL: I think that's what he told me.

GIBSON: I know Shannon was the last one out of our class to fly, and she went with Dan [Daniel C.] Brandenstein on his second mission, which was his first mission as commander [STS-51G]. I didn't remember which pilot, to tell you the truth, was the last one to fly. I guess I was the fourth one to fly, out of 15. It might have been Covey. I don't know why Covey would have been the last one to fly. I was always very impressed with him, always very impressed with him. He was by the numbers, he was not a cowboy, he was a very professional aviator. I don't know why he would have been the last one to fly.

ROSS-NAZZAL: He had some good missions. He got to go to the Hubble [Space Telescope].

GIBSON: He was Air Force. He was Air Force, and it has to be acknowledged that there was a Navy bias.

ROSS-NAZZAL: You agree with Mike Mullane?

GIBSON: Absolutely, absolutely. It certainly benefited me, but nonetheless, that's not right. That's not the way to do things. I think the world knows that George Abbey had gone to the Naval Academy [Annapolis, Maryland]; there was no Air Force Academy [Colorado Springs, Colorado] at that time. When it was time to graduate, you could pick which service you wanted to go into. He went into the Air Force, and he was not treated well in the Air Force. My opinion is he took that out on the Air Force. If you just look at mission commanders for the first 15 missions, STS-1 was Navy, STS-2 was Air Force—we're even at that point—STS-3, 4, 5, 6, 7, 8,

9, 10, 11, so at this point, we're 9-2 in mission commanders. I agree there was a bias on behalf of the Navy, and as I said, that's not right. When I was Chief Astronaut, there was no such thing. There was no military bias. I paid no attention to what service the people were from when it was time to put them on missions and give them job assignments. Like I said, I don't think that was right.

ROSS-NAZZAL: We had done some additional research and found out that you worked on the STA HUD [Shuttle Training Aircraft Heads Up Display] for a short period of time. Do you have any recollections of working on that?

GIBSON: Actually, I don't think I did. I was one of the pilots that got one of the first opportunities to look at it, but I think it was only a couple of hops, Jennifer. It wasn't a long program. In the course of STA training, I was probably one of the early ones to look at it. I don't remember a whole lot about that.

ROSS-NAZZAL: You also mentioned being a Cape Crusader. I always ask people, do you recall where that name came from? I've always wondered if that was something the Shuttle astronauts came up with, and if so, where the name came from.

GIBSON: I don't know. I don't know. I wasn't one of the original group, and in fact, I was just part-time. I was a part-time Cape Crusader, and my recollection is that it was Bo [Karol J.] Bobko that I would report to. He was the one that would come to me and say, "Hey, we're going to have some testing on such-and-such down there at the Cape next week, and we're a little bit

shorthanded. Can you go down there and do some of the testing in *Columbia* on such-and-such a day?" Like I say, I was just part-time down there, so the guys that were full-time, I think Loren Shriver, at the time, was one of the guys that was down there all the time, and they'd be down there every week. I just went down there now and then.

I was down there for the annual picnic—and this is going to be a little bit self-serving—and they decided that they were going to have a Mr. Legs contest. I thought it was very sexist, but I took part in it anyway. What they had us do was all the boys that wanted to be in it, I didn't really want to be in it, but I was the only astronaut down there and they said, "Come on, you've got to." I won the Mr. Muscular Legs award down there at the Cape. I've still got the little medallion they gave me. They made it out of a steel washer, and they put a paper thing in the middle—I think it was 1979—it says "Mr. Muscular Legs, 1979." They tied a string to it or something like that, so I did that while I was down there, for some of the Cape Crusader testing that was going on.

ROSS-NAZZAL: Those are good memories to have, good mementos.

GIBSON: It was always fun to be down there, and any time you were down at the Cape, they wanted you to wear your flight suit because they wanted the folks that worked down there to get to see who they were keeping alive, and get to see who they were doing all this hard work for, and also give them an opportunity to walk up and say, "Hey, I'm Jim Schultz, who are you?" Just get to meet an astronaut. You were always on display because you were wearing your blue suit everywhere you went, and including in the Orbiter, when we're doing the testing in the Orbiter, they just wanted us to wear our blue suits for all of that. That was kind of fun. It's a

whole lot more enjoyable when you're not on display and you can just blend in to the woodwork, but when you were working as a Cape Crusader, like I said, they wanted us in our blue flight suits.

ROSS-NAZZAL: We have just a few more minutes, but I have to ask this question, just because I asked Rhea and she wasn't sure, so I was going to ask you. I read in an article—I think it was a *People Magazine* article that came out when you and Rhea, either you had just gotten engaged or you had just gotten married, I can't remember which.

GIBSON: We had just been married.

ROSS-NAZZAL: There was something in there about how you had been contacted by a bridal magazine and they had left a message for Mr. Seddon. I just thought, "Oh, I would love to hear the story behind it," and I'd like to hear what your classmates and other people in the Astronaut Office thought about that.

GIBSON: I think that that came from one of our classmates. I think it was *Brides Magazine*. I don't remember exactly why, but chances are, Ellison Onizuka was behind it.

ROSS-NAZZAL: Another one of his pranks.

GIBSON: I think it had to do with the fact that this was very unusual in that timeframe too, Rhea kept her maiden name. Rhea didn't change her name to Gibson. I never told her this, but I

remember it even peeved me a little bit at the time, that she wasn't going to change her name to Gibson, because that just didn't get done very much in those days. After we married, the boys took my nametag off my locker, the little leather nametags like we wore on our flight suits that had our wings on it and all that, they had one made up for my locker that said "Hoot Seddon," and stuck it on my locker. It really torqued me off.

It really annoyed me, that they had put this thing on my locker, but I knew what would happen if I ripped it off of there and threw it in the trash. The next day, they'd have another one made up and it would be right back up there, so I left that stupid nametag up there for like three years, and then I finally ripped it off there and threw it in the trash. I had to leave it there because if they find something that annoys you, you're going to hear about it, over and over and over again. I didn't dare take it down right away. I think that *Brides Magazine* thing, I just vaguely kind of remember that, but I think that's where that came from, the fact that she kept her name, and so, therefore *Brides Magazine* wanted to talk to me.

ROSS-NAZZAL: I just thought it was an interesting story, so when I asked her, she said, "I don't remember that. You're going to have to ask Hoot about that," so I thought she might like hearing that answer. I thought, if you wouldn't mind, I'd ask Rebecca if she had some questions, then we can close out and talk about some future sessions.

HACKLER: If you have time, I just had one thing I was curious about. You mentioned your mother was a pilot, and when you were talking about that, I was wondering if as you were growing up, you were aware of that being kind of an anomalous circumstance, for a woman to be a pilot, or if you didn't really think about it. How did you process that?

GIBSON: I knew, once I got old enough to really kind of understand some of that, that yes, this is kind of unusual. There were enough people that would say, "Oh, my gosh, your family is really unusual because your mother flies." It wouldn't be too unusual to have the dad be a pilot, but certainly, it was very unusual to have moms that were pilots. Yes, I did realize it was kind of unusual, but it was normal in our household. My mother flew in the All-Women's Transcontinental Air Race twice, also known as the Powder Puff Derby. She raced in the Powder Puff Derby. Another year, she raced in, I think they called it the Palms to Pines Air Race. That was an all-women's transcontinental air race. I remember they would race to Atlantic City [New Jersey] from San Diego, I think it was.

They'd take off in San Diego and they had some strict rules on it that I'm sure not all of the women abided by. It was supposed to be daylight-only and it was supposed to be only visual flight conditions, and it was a handicapped race, so you could enter any kind of an airplane into it. This airplane's normal cruising speed would be, say, 120 miles an hour. So, how well did you average 120 miles an hour or more, in getting there? Theoretically, somebody in a Piper Cub could win against some of the real fast general aviation aircraft. My mom did that two years, and then the Palms to Pines Race was the same sort of thing, it was a handicapped race. In my case, I would see, over the years, a whole lot of women pilots, so it didn't seem unusual to me although eventually I was old enough to realize that yes, this is unusual, to have a mom that's a pilot.

HACKLER: Do you think that influenced how you thought about the first female class of astronauts at all?

GIBSON: Good point, it may very well have. Yes, it may very well have. Yes, I think there was probably some reluctance about women flying combat airplanes, and I'm not even sure I really want women in combat, although I have come to accept it. Like my dad, I don't want any of my daughters flying in combat, or serving in combat, but I suppose to be fair and equal, you've got to give them the same career opportunities. That may have affected my outlook on it and my attitude on it was well.

HACKLER: That was my one thought, thank you.

ROSS-NAZZAL: I think this might be a good stopping spot.

GIBSON: Wow, it's 3:30.

ROSS-NAZZAL: Isn't it amazing how time flies?

GIBSON: Yes, it sure is. Boy, I sure talked a lot.

[End of interview]