

NASA JOHNSON SPACE CENTER ORAL HISTORY PROJECT

ORAL HISTORY TRANSCRIPT

EUGENE G. EDMONDS
INTERVIEWED BY SANDRA JOHNSON
HOUSTON, TEXAS – 25 NOVEMBER 2003

The questions in this transcript were asked during an oral history session with Eugene G. Edmonds. Mr. Edmonds has amended the answers for clarification purposes. As a result, this transcript does not exactly match the audio recording.

JOHNSON: Today is November 25th, 2003. This oral history interview is being conducted with Eugene Edmonds, in Houston, Texas, for the NASA Johnson Space Center Oral History Project. The interviewer is Sandra Johnson, assisted by Jennifer Ross-Nazzal.

I'd like to begin today, Mr. Edmonds, by asking you to share with us your background and when you first developed an interest in photography.

EDMONDS: Okay. I was in the military and spent about eight months as a prisoner of war, and came back and got out of the military close to Durham, North Carolina, and I was visiting Duke [University, Durham, North Carolina] one weekend, and found out that I could go to Duke, and I did. While I was there, of course, I didn't get much money from the government while I was there, and I didn't have any money, so I got interested in talking to the photographer one day, the Duke photographer, officially. They had a lab and everything. He was getting ready to go on a job and needed some help, and says, "Hey, would you go with me and carry this?" And that's the start of me and photography.

I got interested, and he gave me a part-time job as his helper for the four years I was at school. And that's the way I got into photography, and I got so obsessed that I just turned away

from everything that I had studied, psychology and sociology, and decided to go home and open a studio, with no money. [Laughs] And that was rough.

But anyway, after several years—in those days, when you’d take portraits, you needed a colorist to color them. You didn’t have color film for portraits in those days. My colorist, her husband was personnel manager at [NASA] Langley [Research Center, Hampton, Virginia], and one Christmas Eve, there it was around six o’clock at night and I still had two orders to deliver, Christmas Eve, for Christmas presents. A woman and her children. And I had to call her and tell her the coloring wasn’t ready and it would probably be eight o’clock or longer, Christmas Eve, and she’d have to come to the studio and pick them up.

So I went over to the house and she says, “It’ll take me about another half an hour at least to finish.” And she says, “Go in with my husband and talk to him by the fireplace.”

And we got to talking, and he says, “Gene, do you realize that this is Christmas Eve and you’ve got a wife and a young, newborn baby, and they’re home by themselves and here you are. It’ll be nine or ten o’clock, Christmas Eve, before you get home, and you work seven days a week.” He says, “Why don’t you quit that stuff and let me try to get you a job at NASA. You know you only work five days a week here.”

“Well,” I said, “I’ll think about it.” Well, I did. All Christmas day I thought about it and thought about it. So then, finally, I talked to my wife and, of course, she was real happy that I was interested.

So anyway, come the following week, I called him and he said, “Come on out. I’m going to be all day tomorrow at the office, and talk to me.” He gave me an application. I filled it out, took it back to him, and he said, “Gene, let me tell you the way this works now.” He said, “It is not very often, that we ever hire a photographer, haven’t hired one in years. The way we do it is

we take the application and you have to have a minimum of eighty points to be considered. And after we get all of them and then we're ready to consider, if you got eighty points or above, it goes over to the Personnel Board, and they will review the highest three people, above eighty." So he says, "Okay, now I'll take your application and tomorrow, first chance we get, we'll get the point system."

So he called me one day and says, "I got some bad news. You don't have but seventy-eight points. So run out here and talk to me and see what we can do, if we can come up with any more points from anywhere."

So while we were talking, it came to me, I said, "By the way, I got the Purple Heart [military award]."

And he said, "Oh! You get five points for that." He said, "Get me some proof."

And I said, "Well, all I've got is my discharge."

And he said, "Well, that should do it." And I went home and got it, brought it back to him, and he says, "Tomorrow the board meets and will make the decision. We have two above eighty right now, and we'll get you up there when we show them this."

Well, he called me back, and said they would not accept it. That wasn't enough proof for them, but I don't remember why. But anyway, he says, "I'm sorry, but they won't accept it. Do you have anything else?"

I said, "No."

He said, "Well, I'm awful sorry. Goodbye."

Well, I went to bed that night and I woke up about three o'clock and I laid there thinking. The Pentagon in Washington, D.C., that was two hundred miles away. I said, "I know they've got all the records. I jumped up, dressed, got in my car, and drove eighty miles an hour. Left

home at four o'clock, got into the Pentagon, and, of course, it took me nearly an hour to find somebody that would talk to me. And this colonel behind the desk, he says, "We don't have any records here at all. They're in a place in St. Louis, [Missouri]," and that turns out that's where all World War II records are.

So I talked him into—I pleaded, and I think he felt sorry for me, and he got on the phone and called them, and they found the records and they sent a telegram. They didn't have faxes in those days. So they sent a telegram signed by a couple people there in the office.

So I thanked him, rushed home, got home three o'clock and went out to [Norwood] Evans' office and gave him the telegram and he says, "We're going to start the board meeting at four o'clock." He called me at six and said, "You've got the job."

And I said, "Thank you." And that was it.

And in those days, the NACA [National Advisory Committee for Aeronautics] was on an Air Force base, Langley Air Force Base, and was located on one corner of the base. It used to be called NACA, and then Congress changed it to NASA. Then several months before this, they had created the Space Task Group and they had put it at Langley temporarily. They didn't know how long before they would find a permanent base.

So I went to work, and I went to Langley Personnel and they sent me over to Space Task Group, and they had an office over on Langley Air Force Base. I went in Personnel and they went in a couple rooms and talked to two or three people. "No, I don't know anything about him." And he says, "Who is he? Where'd he come from? We didn't hire anybody. We don't know."

So after a little while, they said, "Well, I think you better go back to Langley Personnel and tell them that we don't know anything about you."

So I went back to Langley. They made some phone calls and talked to several people, and finally they came out and said, "Look, we're going to send you to the photographic branch chief here at Langley, named John [R.] Brinkmann, and that's who you will work for."

I said, "Okay." So the next day, they called me back to Personnel and said, "Look. We found out that Brinkmann had been complaining so much for the last month about how much—every time he turned around, the Space Task Group would want a photographer over there in their office, for VIPs or to go to Washington to photograph something. And you know they have plenty of money and we don't have travel, overtime, or anything of that nature, so he came to Personnel. Well, we talked to the higher-ups at Space Task Group and they said to go ahead and hire somebody and he'll belong to us. We'll pay his expenses and everything." Well, they didn't go down and tell their Personnel, so that's why they didn't know anything about me.

So anyway, then I started getting all this overtime on weekends and travel and everything. And you know that they told me to call them every day and give them my official hours that I worked, and my overtime and my travel and all of that. Now, I did that every day on the telephone to tell them, "I worked ten hours yesterday. Two hours overtime."

Well, anyway, that went on, but in the meantime, Brinkmann and I became good friends, and he put me in a good training program for a month, and I started things. I knew nothing about the space program or what was planned or anything, when I got started. When the Mercury program was starting, and we would do everything, testing all kind of hardware, trying to get the right size and shape and everything for the capsule. They would use smaller planes that they could carry something up and dump it out the back, just to see the size, shape, and everything, trying to get the basic development information.

Well, they'd want everything photographed, so I started out in a helicopter, following these planes up about a thousand feet, and they'd dump something that looked like a barrel or something out. We'd go up two or three times a day and it would be a different shape and different size. And that went on for a while. Then they would develop another part and one piece would be a capsule; another part would be something else, and all of it was—they call it a cluster, all the pieces.

Eventually they got to the point where they developed it to where it was getting nearer the real thing, and then they wanted to start testing it at higher altitude. Then eventually they would put one piece together with something else and it would have to be separated and the chute come out, and all of those things. And it reached the point where they were going to start firing it off of a rocket up at [NASA Wallops Flight Facility,] Wallops Island, Virginia, and they were going to fire it, say, about ten thousand feet, and they wanted that covered.

So NASA called the Air Force and talked to them, and they said, "Yes, we'll furnish you a jet plane and a pilot." So Brinkmann called a meeting and asked for volunteers. He had about eighteen photographers, and he says, "Now, I want to tell you, we don't know whether the government insurance will cover this type of aerial flying, covering a rocket firing, if you are injured or killed, because it's a new thing that nobody's ever done before."

Well, nobody volunteered but me. And Brinkmann says, "Well, I'll do it, too." So he and I flew the first time and since they wanted to be safe, they said, "You'd better make at least a ten-mile circle the first time," because it was just a little piece of hardware.

So they fired the rocket and we made about a ten-mile circle. Of course, the thing was real small and we didn't get any pictures, but it was just to see how it worked. So then the next week, they fired again and the same two pilots flew us again and they went in to five miles and

we got some pictures. They were small. And the next time, we went in a mile. [Laughs] Close. And everybody was very excited over it. And each one was higher so I would take the high. What we'd do, if it was going up to twenty thousand, I'd be up at twenty thousand and photograph it as it came up. Then when it got up at twenty thousand, it would stop, and then the capsule would separate and start back down. Then we would descend to twelve thousand, where the chute came out. Then Brinkmann would pick it up and follow it down. So that's the way we did it.

Then, when it got to look like it was going to be so much of that, Space [Task Group] hired another fellow, Wendall Ayers, and he came and he volunteered to fly and he took his flying training with the Air Force, then we chased quite a few rocket launches like Brinkmann and I had done. In early 1961 we received an invitation to become the first to chase and photograph a rocket launch at Cape Canaveral. It was Mercury 2 [MR2] with the chimpanzee Ham on board. Cape personnel advised the pilots to play it safe and fly further away than we normally did.

I just remember a time, the closest we ever flew to a rocket as it came up. I was with this hot Air Force pilot they'd brought up from Florida, and in one of the fastest jets the Air Force had at the time, the [McDonnell] F-101 [Voodoo]. We trained two flights and we were to go around 45,000 feet high and that's where the capsule was going to stop and start back down. So we were up there and we were circling around, and we saw the rocket coming up. He leaned over, turned over almost upside down, and I got the rocket coming right straight up at us. And all at once, it stopped and the parachute opened, and this was at probably about 20,000, 25,000 feet, and I screamed at him and told him to, "Go down! Go down!"

Well, he did a violent inside loop maneuver, turning the plane back and over to go back down, and I started hollering at him again. I said, "Down! Go down!"

And he said, "Gene, will you shut up and let me try to restart these two engines?" Both engines had flamed out. When he made that loop too fast and too violent, it cut the air out of the engines and cut them both off. I had never been in a plane before where more than one engine went out at the time, and you could always fly with the other one. And in order to restart them, you have go straight down and pick up enough air pressure to start them again.

So anyway, he got it started and everything went all right. The mission turned out to be okay, except that it didn't make its altitude.

By now, then they were ready to go out on a carrier and have the carrier to pick up the capsule. They were going to fire one. They weren't ready to go around the Earth yet, but they were training to fire an unmanned one and let it come back down, and then the carrier could learn how to recover it, way out at sea, maybe two or three hundred miles out or something like that. Then I went out and just watched it and did nothing that time.

Then when they were ready to launch the first one, [Alan B.] Shepard, on the first Mercury mission, the Navy photographers took all of the pictures. I didn't go on that mission. And NASA received very little in the way of photography, so then we suddenly realized that the problem would be the same in the future. So they talked to me and asked me would I go out and take charge of all the photography on the recovery, and I said, "Yes, I'd be happy to."

And they said, "Well, give us some kind of plan."

And I said, "Well, I'll carry two or three photographers with me to start with, and then I want the Navy to assign two or three of theirs to me, and then I will make all the decisions,

where they stand and what they do and what we want for a total coverage, plus putting somebody in out of the helicopters that go out to the capsule to pick up the astronaut.

So the Navy agreed, and then I went on my first mission, which was [Virgin I.] Gus Grissom. Then, the hatch blew off of his capsule and the water was coming in and he had to get out, and into the water, and they had trouble picking him up. They would go in too low to drop the sling to pick him up and they would blow him forward from the helicopter. And I was taking movies of it then. And in the movie, *The Right Stuff*, I think I had about eight seconds of my movie in there, twenty-five years later. But anyway, they finally decided to go up, straight over him, and come down, and then they didn't blow him anywhere and they picked him up.

Sometime later when I returned from one of my trips, I found out that the Space Task Group had decided to create a Photographic Office and had appointed Andrew M. Sea to head it. Soon after he transferred he convinced Alvin H. Morewitz to be his assistant. Alvin was another of Brinkmann's 15-year GS-9 desk lovers. By this time they all had little to say to me since I was a GS-9 after two years of so much travel and overtime.

A few days after I got over the shock, Andy Sea asked me to come over after work and talk to him. Then he offered me a job. I wasn't very happy at all, but I wanted to go back to the Space Task Group and I had forgotten a while before that Brinkmann convinced me to transfer officially back to Langley because I had officially been assigned to the Space Task Group. He had said, "The Space Task Group will never survive in the long run. It will fade out. They are going to move to God knows where."

So I had gone back to Langley even though my heart was still with the STG [Space Task Group]. I said "Okay Andy, but lets try to keep it from Brinkmann for now."

Whenever I had the time, or after work for a month or so, I would go over and work on an organization plan and write purchase requests for new equipment. Later I heard that a fellow named Jack C. Heberlig, a long time NACA engineer, had been transferred to the Space Task Group to mainly assist them in the organization of the STG, since so many Langley people were trying to transfer. He found out about this Andy Sea business and he went to talk to the higher-ups at Space Task Group and he told them that he knew the capabilities of Sea and Morewitz and all of Brinkmann's people and how good Brinkmann was, which was true. He told them that they had made a terrible mistake and that they should reorganize and form a photographic division and have two branches and put all of the aerial and engineering and still photography in one branch, and then have the laboratory processing in the other branch. Well, he convinced them. And he said, "Make Brinkmann the division chief."

After Heberlig found out that I had wanted to transfer back to STG he called me in and said, "I'm going to need some help." Then he said, "I'm afraid I might have some trouble convincing Brinkmann to take this job, but I've convinced those people that he's the best man, and they've accepted him, so now help me to convince him."

So a few days later, Brinkmann asked me to go to lunch with him, and he said, "I found out that you are thinking about going back to Space Task Group. Now, what is the matter with you?" And he said, "Why? Just tell me why."

Well this went on for an hour and I told him every reason and convinced him why I was going and when I got through he said, "Okay I think you have helped me to make up my mind."

Now I realized that all of that was put on for me to try to help him decide to accept the job. Then he called Heberlig that afternoon and accepted the job. Then they transferred Sea and Morewitz to the new Public Affairs Office.

After that came the big Mercury mission, M6, John H. Glenn's orbital flight. We boarded the Carrier USS Randolph and trained several days before lift-off. On each mission there were three support destroyers, one fifty miles to the right of the carrier, one fifty miles **to** the left and one fifty miles behind to recover the capsule if it was decided that that was the best situation at the time.

So after Glenn's impact it was decided the destroyer USS Noa should recover the capsule. Shortly after impact the NASA recovery engineer, National Geographic photographer, and myself boarded a helicopter and rushed to the Noa. I was the first to be lowered down to the fantail, or after part of main deck. I got in my sling and held my camera in one hand and case in the other hand and when I got a few feet from the deck I started to unbuckle the sling strap. Just then the destroyer went full speed ahead and turned sharply and left me hanging just above the water about 10 feet.

The helicopter pilot thought that they had done it on purpose and I agreed. They didn't want any NASA personnel aboard since they had Glenn and were conducting many ceremonies. The pilot flew out, circled and chased the destroyer until he finally got me over the fantail again. Of course I had still been swinging over the ocean.

After I was safely on the deck, I looked for John Glenn and found him being looked after by the doctor who was trying to examine him but there was the Chaplain on one side, two or three people kneeling on the other saying, "We are from the so-and-so, we give you this in honor, we welcome you aboard, will you sign this," and on and on.

After taking some pictures I went to the spacecraft and talked to the NASA engineer who sailed on the destroyer. He was removing, checking and packing all of the required items from

the capsule to be returned to Houston. My job was to get them back as soon as possible. He said, "I'll have everything ready for you in about two hours."

A little later as the sun was setting the helicopter came and picked Glenn off of the deck and took him to the carrier. I got some pretty motion picture film, and then went to the ship's Captain and asked him to call the carrier and tell them that I have my packed items and am ready to go. What are my orders?

He said, "I'm not doing that since I have no orders to do anything for you. I suggest that you go get a nice meal. I'll instruct them to fix you something special and then you can go get a nice nights sleep."

I said, "Look, as an official NASA person, I request that you call the Admiral and tell him what I told you and ask for orders."

Finally he agreed. "Go eat, I'll send for you."

So about halfway through my meal a guy runs in and says, "The Captain wants to see you now."

I went in and the Captain says, "Edmonds you must be very high in NASA or Admiral Eastwald has lost it. I have been instructed that you will make a highline crossing to the carrier in the dark at flank [top] speed, which is forbidden for Navy ships. Good luck to you. We are scheduled to reach the carrier around 9 p.m."

When we reached them and were side by side, the waves were about fifteen feet high, wind blowing hard, and of course it was dark. I've never seen them work so hard to get those cable lines across and hooked up and get the chair fastened to the line and sent over for me to get in. They were trying to strap me in that chair with my two containers. Going over to the carrier was about the scariest and most frightening experience I had in my twenty-eight carrier missions.

When I got back on the carrier they rushed me to a plane, and pushed me in, shut the door and the pilot yelled, "Strap in fast, we are ready to catapult." John Glenn was in the plane in front of us. We landed in Grand Turk. That was a great day when you add it all together.

After a couple days at home I went to Houston to open a temporary division office in the Farnsworth Chambers Building, NASA's temporary new headquarters. I made everyone aware of the Photographic Division and their needs—space, equipment, vehicles, etc. I went back out to Fairmont Park [La Porte, Texas] and bought a lot and got house plans to take back home with me.

The next mission was M-7 [Mercury 7], Scott Carpenter. Lots of exciting times. The regular marine recovery helicopters could only go about seventy-five miles out and back from the carrier considering the fuel used picking up the astronaut. Carpenter landed about two hundred and fifty miles from the carrier. There was a new helicopter squadron aboard the ship commanded by Lt. Wonderjim and they had been training for the week that we had been to sea, but had had many problems. However Lt. Wonderjim begged the Admiral to let him take three helicopters and make the pickup, since they had the flight range. After the Admiral and NASA discussed it, they agreed and then I begged the Admiral to let me go.

Wonderjim, who I'll mention on a later mission, said okay. "I'll take Gene."

So I jumped into the big helicopter and started to close the door and saw a couple of media fellows running toward me. As I closed the door they threw two 35 MM cameras at me and said, "Shoot something for me." One was a Leica from the Associated Press. [Laughs]

Carpenter had been waiting hours since landing. When he started up, the helicopter operator pushed the wrong button and he went down in the heavy green dye around the capsule. After we got him inside we cleaned him off. On the way back I got a good picture of him and

the pilot Wonderjim. Two hundred and fifty miles [almost] each way. A long ride. We had a great welcome when arriving back to the carrier. Flew to Grand Turk again and then home. Months later on another mission the same media fellow said to me he was sorry. I asked him what for. He said Life Magazine had printed the picture I took on his camera and put it on the cover [printed millions] but just then, the stock market hit rock bottom and they destroyed them and printed a new stock market cover. [Laughs]

Then the first launch to land in the Pacific was coming up, [Walter M.] Wally Schirra [Jr.], M-8, and we were going to Pearl Harbor [Hawaii] to get on the carrier, and that would be our first one in the Pacific. Of course, in the meantime, a week before that, I had gone to Virginia to pick up my wife and two children and drove them back to Houston. The house was completed and the furniture had been delivered. When we arrived the temperature was 102 degrees in La Porte and it was like that for a week. It was quite an experience but we were happy with the place and always have been.

So on to Pearl Harbor, Hawaii. The NASA recovery team leader was John C. Stonesifer. When we arrived, John, myself and three or four of my photographers, and some engineers made up the group that had reservations at the Hawaiian Hilton Hotel. We went in as a group and he walked up to the desk and they said, "Oh, Mr. Stonesifer, we have a message here for you."

He opened the message and it said, "The mission has been postponed for a minimum of seven days. Give us a call."

So Stonesifer called and said, "Okay, you want us to try to get reservations on the first plane back?"

And the guy said, "Well, I hadn't thought about that." He said, "Wait a minute. Let me call you back. I'll have to talk to somebody." So we set there in the lobby and, of course, we

went outside and looked at the beautiful scenes. None of us had ever been to Hawaii before, and we went out and looked around, and I guess it was about an hour till he got the call. And they said, "We decided—we did some adding up of the costs and we decided that you might as well stay there rather than coming home and then flying back. The cost is about the same, and you have the reservations. See if they'll extend them for at least eight days." So eight days, with nothing to do, in the Hawaii Hilton Hotel. [Laughs]

When mission time came up we all went out to Pearl Harbor. When I got on the ship, one of the first people to welcome us was Wonderjim, the pilot that flew that helicopter on the Carpenter mission. He had been promoted and he was an assistant to the captain for this mission.

We worked hard for about a whole week, rehearsing, because that was our first recovery in the Pacific. That carrier had never been out on one before, so we had at least a week's training. Everybody was all tensed up. So Wonderjim called in John Stonesifer and said, "You know something, I've got an idea." He said, "I think that Gene has earned a trick to be played on him for a change." So he said, "Here's what I'd like to do." And Stonesifer approved it.

So Wonderjim called me in and says, "Gene, as far as I know, you can talk your way into anything." And he said, "I want you to do me a favor. I want to test the guard down at the storage room, the top security storage room on the ship, and I want to test him to see if you can get in." And he said, "Tell him anything you want to, because I know you'll figure something out." So he said, "I really appreciate it."

So I went down and I talked that poor kid into getting in that place. I told him that I had some special film in there that I needed immediately, that the admiral wanted some pictures

taken on this film. Of course, the kid didn't know anything about one film or the other, so he was sweating, and he says, "All right. Now, hurry up."

And he opened the door and I started in and somebody hollered, "Stop!" And I turned around, and it was a Marine lieutenant that was in charge of all the security on the ship. All the security people were Marines. And this Marine come over to me and he says, "Where in the hell do you think you're going?"

And I said, "Oh, I'm in a hurry." I said, "I have to have this film."

So he said, "I don't care what you have to have. I don't care who you are." He said, "You NASA people think you own this ship when you come here," he said, "and you aren't going in there." And he just went on and on.

Finally, I said, "Look. You know this whole thing as well as I do, what it's all about."

He says, "I don't know what you're talking about and I don't care what you're talking about. Sergeant, come over here and take this fellow to a cell and put him in Cell 1 until I can get straight and look into this thing. And I will be back and get your—," you know what.

So they put me in there—it was almost dark in there—and locked the door and the sergeant left. And I sat there and I said, "Something has happened. Somebody didn't tell that lieutenant." And I sat there for about a half an hour, and then suddenly all the lights went on and there stood Wonderjim, Stonesifer, the lieutenant, and everybody, just laughing.

And Stonesifer said, "Well, I think that worked out pretty well." [Laughs]

So after that was over, the rest of the mission worked out pretty good also, and then there was one more Mercury mission and that was [Gordon L.] Cooper, [Jr.], M-9, which went pretty well also.

When I got back to Houston they were starting the Gemini Program. The Gemini Program was very similar in most all respects, as far as photography was concerned, as the Mercury Program. The recoveries were pretty much the same also. The only difference was we didn't sweat and worry as much doing the missions in the Gemini Program. During all of the Mercury ones, so many unexpected things happened on each mission, but most of them were worked out the hard way. Then the Gemini missions, most of them went along pretty well. But we continued to do the regular things, covering the recoveries and then bringing back all of the items off of the spacecraft.

Then the Apollo Program. The thing is that most of the time while one program's going on back at NASA the engineers have already been designing and planning the next program.

So the Apollo Program had been started and much of the same preflight planning, building, testing, coverage of all the various of the other two programs, most everything was the same as far as our job of covering. Most of the time, when we tested things on the ground, the photographers would use both a still camera and a motion-picture camera. We'd have a still camera taking close-ups, using the Hasselblad camera and whatever lens was best suited for the lighting and the speed. Then we'd have a motion-picture camera on a tripod and they would be back covering the operation as requested by the engineers. The engineers would call the still photographer and tell him to give him a close up of this and an overall of that.

Then the next thing would be, "Okay. Tell Edmonds to get his helicopter. Starting next week, we're going to cover drop tests." Well, what they did, on this big helicopter, they built a special metal stand, with a couple metal arms around it, and attached it to the nose of this helicopter for me. I would stand in it, and it had a band around my chest here so that I would lean against it to do all my shooting. And we'd start out; sometimes they'd take the thing out on

a boat and put it in the water to do the recovery testing. Then they would put it in another helicopter and carry it up a thousand feet and drop it, and then I would fly under it and watch it coming down, or else fly over it. That helicopter would do whatever was required and sometime make two or more flights a day.

I'll just mention, by this time we had sailed from Norfolk [Virginia], Providence [Rhode Island], Jacksonville [Florida], Honolulu [Hawaii], and we had stopped or stayed in ports like Puerto Rico, Virgin Islands, Dominican Republic, Bermuda, Midway, and a little Johnson Island near Hawaii.

My branch had been expanded to twenty-five people by this time, and we were getting deeply into the Apollo Program. Almost every system on Apollo had to be changed or tested in some way on the ground, and everything in the air, of course, unmanned at first, and the first manned flights proved satisfactory.

Then we came to Apollo 8. That mission was the one to go around the Moon, but not land, just go around. The carrier was the *Yorktown*. The launch would be a few days before Christmas, and I carried a little Christmas tree on board with me and put it in my room and decorated it. And it turns out that they went around the Moon Christmas Eve. That was only the third Christmas in my life that I had been away from home at Christmas. The first time was flight training in the Air Force, and the second time was in prison camp in Germany. Then this was the third time. But with them going around the Moon and my little Christmas tree in my room, it was very emotional. But anyway, the flight was very successful.

The end of all recoveries was mostly the same for me. After the astronaut was recovered and the spacecraft was on the carrier, the NASA engineer removed all of the required items and sent them up to a special room. There, engineers unpacked and examined all of the items, such

as computer data, the film, radiation buttons, blood and urine samples and other things on different missions. They would study, weigh, do required paperwork, repack, wrap them and then call me.

Then, of course, Houston was always screaming on the phone, every fifteen minutes, “Hurry up, Edmonds. We’re waiting.” The plane was always ready to take off on the flight deck. So that was typical.

Then came the big one. The launch was scheduled for July 1969, the one to land on the Moon. We went on the USS *Hornet* in Pearl Harbor, and I was standing on the flight deck watching. I could not believe the people, the equipment, and the vehicles coming aboard.

There were two Mobile Quarantine Facilities, called MQFs, and one Lunar Receiving Lab, the LRL. The MQFs were like big Air Stream house trailers. They were for the astronauts to change clothes and rest in. The important one to me was the LRL, and that would be used by two isolated scientists, who would unpack, assort, list, weigh, examine, and repack everything brought back from the flight. The hottest items would be packed in sealed containers and lowered into a tank filled with formaldehyde. After ten minutes, the package would be moved into an empty unit that could be opened from the outside. .

The mission went off very well, and after the recovery and President [Richard M.] Nixon welcomed the astronauts, I went to the Lunar Receiving Lab to find out how long it would be before my items could be removed. They were all packed in two containers and taken to the helicopter. Two other people, Dr. Thomas [O.] Paine, Director of NASA, and an engineer, and myself boarded the helicopter, with my containers, and went to a little island called Johnson Island, off of Hawaii, where we boarded the largest airplane that I had ever been in, the C-141 [Starlifter]. We took off, climbed to forty thousand feet, and headed, nonstop, to Houston.

Dr. Paine and myself relaxed and laid back with glasses of V-8 juice, and he turned to me and asked me, "Is this the first recovery you've ever been on?" And I had to kind of turn my head to laugh, because that was my twenty-eighth, including all the manned and unmanned recoveries.

Then he laid back and told me all about the launch and the mission, which was very interesting; things that I knew nothing about. We had our bare feet resting on the two white pressurized containers, and he said, "Gene, do you realize that the entire world is waiting to see what's in these boxes."

I was falling to sleep when I heard him ask if I would do him a favor. Imagine him asking me that. "I'll try. What can I do?"

He said, "I want you to take a picture of me standing on one of these boxes." And I did. Of course, I did, and then we slept from there to Houston.

When I got back, John Brinkmann says, "Gene, you've had it." He says, "Hang 'em up, and you're going back to the desk." So I did and Skylab was the next program after the completion of the Apollo Program. Skylab required very little support from us, except for the usual pre-mission hardware testing.

Then the Earth Resources Program started to grow considerably. Earth Resources was one of my regular programs, but it was increasing in requirements and size, taking a lot of my people away more. The Earth Resources Program was one of the biggest programs of our division. It involved three large aircraft and dozens of large, high-altitude, aerial-mapping cameras. Black and white, color, and infrared films were used in all of the cameras; were operated from a large camera console. Cameras were mounted in the bottom of the aircraft in clusters. Most missions lasted approximately two weeks, with rivers, mountains, cities,

shorelines, and crops being photographed all over the country. We even made several trips to foreign countries. Usually the photographers traveled in two-man teams. It was a good, solid photographic program and one I was happy to have, since the long-range future of the space program was uncertain.

We began the next year with no spacecraft flights scheduled. We had already been covering drop tests on a sleek white and blue model that looked more like an aircraft rather than a spacecraft. Of course, we didn't know what it was, but it was to be a spacecraft of the future. The program would be called Space Transportation System, STS. Its vehicle would be called a Space Shuttle, and it would land on a runway. We were thrilled to be involved with the new program, which meant more flying, traveling, astronaut training, and planning operation for the next five years at least.

I was sent to [NASA] Dryden Flight Research Center, DFRC, which was located on one end of the huge Edwards Air Force Base in California, in the Mojave Desert. I was told that day to take pictures of the first real Shuttle that would fly, and it was scheduled to be brought out of the hangar that day and made ready for a big major press conference the next day.

Well, it turns out my jet pilot was Vance [D.] Brand, the first astronaut I had flown with. I later flew with seven more astronauts, which produced some extremely exciting times. I won't go into those. [Laughs] But anyway, as we landed and taxied toward the ramp, the doors of the hangar opened and here come the Shuttle mounted on top of the [Boeing] 747 [Shuttle Carrier Aircraft], heading right for us. I jumped up; I pushed the button, threw my canopy back—and Brand didn't know what I was doing, because he was in the front—and unbuckled and stood up and took pictures over the top of his canopy, and they were beautiful. They were coming right straight at me, and I took a whole roll, coming at me and then as they passed us.

We got out and started talking, and Brand, of course, he was in no hurry. We were supposed to have lunch and everything, and I was taking pictures. We were going leave sometime late that afternoon. I called him aside and I said, "How hungry are you?"

He says, "Well, I'm looking forward to a big meal."

I says, "Let's get a snack and head back to Houston with my film." And I talked him into it in a little while and we headed back, and the lab processed all and made pictures and delivered them to all the VIP offices at Houston, and they had them all, looking at them, the next morning when they had the major press conference, and the press saw them for the first time. So I gained some points on that one.

But anyway, I went back the next week and flew when they launched. It was called the piggyback mission, and it would be the first time when it would separate from the 747 and then land, and I flew and took pictures of the separation.

So then DFRC was in charge of all the flight operations from the standpoint of the operation itself, and the Air Force owned all of the runways and the lakebed. They were getting in hassles already and each one was setting rules, or starting to set rules for everything, and I knew it was going to be quite a photographic problem. So I found out that a team leader from DFRC was down at Houston having a briefing one day on the operations at Edwards and Dryden, so I went in and talked to them and asked them if they would consider letting me take charge, like I did on the carrier. Finally, they said, "Okay, we'll discuss it." Then they called me back and says, "Yes, they agree." And I told them that I felt that I could go out there and work with the two of them and come up with a plan that they would accept, I hoped.

So I produced an operational plan, which showed where I would place my photographers and the ones that each of them provided, and what type and size equipment they would use, and

that they would then take all the film to Houston and provide them copies. I addressed them in a meeting and they all agreed and they appointed a fellow named Larry Biscayart, from Dryden, as my assistant, and he would be the leader when I wasn't there and work with me back at Houston.

In the meantime, the zero-G [gravity] program was increasing, because we had all of these new astronauts that were going to fly on the Shuttle Training Aircraft in the zero-G weightless program, and they would fly almost every day and require two photographers. They were testing new Shuttle crewmembers and regular hardware that was onboard, too.

The Shuttle missions were going well up to that time. My plan worked out pretty good. We always had minor problems every mission, because something new would come up and we'd have to make different last-minute changes, and I would have trouble with all of the security people from the Air Force, and then Dryden had all their security people, and different kinds of badges, and it always caused problems out on the Dryden Lakebed.

But anyway, basically the missions themselves went well. For landings, all of the VIPs would be there, all the high NASA and Air Force. Everybody wanted to meet and shake hands with the astronauts, and sometimes they would have congressmen present to welcome them.

Well, this mission was scheduled to land at the Cape [Canaveral, Florida]. So knowing that it could be changed, we had all of our people in their regular positions. And what we did, since they would allow so few people out near the landing, I arranged for everybody to have their cameras on tripods. They would have a base plate and a minimum of four cameras with all different length lenses, and it would be two stills and two movies. Some would have different-type films and some would have long lens and some would have shorter lens, and all operated by one person on a tripod, and that worked real well.

Well, anyway, this day, we were all in position, and right at the last minute, they changed the landing from the Cape to Dryden. So after the landing, it would usually be some time before the astronauts would come out of the plane, sometimes thirty, forty minutes. In the meantime, a couple of us could walk up closer, to get better pictures of them as they came out. Well, they came out, and the first one in the line to come out was [Robert L.] Crippen. I was taking movies of him, and I kept looking and he kept coming closer and closer, and when he got almost as close as you are to me now, I dropped the camera and I saw his hand go out. So I shook hands with him.

Well, after he turned to walk away, there was Sally [K.] Ride right behind him, and she stuck her hand out. Well, I shook it. There was nobody out there but a couple engineers and a couple photographers and myself.

Anyway, when I got back to Houston the next day, I got a call from a VIP, said, "Edmonds, I'd appreciate it if you wouldn't make such a move again." [Laughs] Because it was on a newsreel. All of the media were back with longer lens, getting the coverage.

Then came the first night landing. There would be very little light on the runway, and we were ordered to stay a long way from the runway. Long lenses are not suitable for a landing that doesn't have much light, because the long lens doesn't have the f-stop that will open enough as you need it to. In the meantime, I had bought a new short lens from Nikon that had something like an f-1 opening, a real, real wide opening. So I knew I had a problem and that I would have to find a way to solve that problem without anybody knowing it, and I did.

There was a dirt road that ran parallel to the runway and was about 200 feet from the edge of the concrete. From the road, there was about 150 feet or more of thick tumbleweed and

other green thorny brush that ended at the bottom of a fifty-foot clear sweep to the incline leading to the runway. We were absolutely restricted to the dirt road for the landing.

Twenty-five minutes before the landing, I began crawling through the thick brush, on my stomach, in total darkness. When I was near the edge of the brush, I just stopped and laid there, stretched out, and waited. The DFRC security guards were driving both ways on the runway and on the dirt road, using their searchlights, checking to see if all personnel was in their right positions.

Now, we all knew what crawled through those bushes at night: large ants, lizards, spiders, scorpions, and I won't mention snakes. After ten minutes, many of them were crawling around, over, and, judging from the burning sensations, it seemed like through me. [Laughs] By now the landing search lights had come on, and after two loud sonic booms indicated that the Shuttle was nearing final approach, I stood up, brushed off, thanked God, and walked part of the way up the incline to the runway and knelt and took pictures. The results were later used extensively throughout NASA and the media for years to come. I then ran back to the road, picked up my original position.

The next day, while treating me, the Dryden doctor asked, "What the hell did you do, Gene? Lie on the lakebed last night?"

"Of course not. I've got more sense than that."

I stopped by the press trailer, picked up my twenty-five eighty-by-tens of my touchdown pictures, and was asked how I got close enough to get these great shots. I smiled, scratched a little, and headed for Houston.

Now, after the last of eight or nine missions, in 1985 I presented Dryden with a plan for them to take over all landing photographic coverage. Before leaving, I spent awhile thinking of

the five years of misery that I had spent on that lakebed. We had to take our positions three hours before landing, in temperatures anywhere from freezing to 110 degrees. After thirty simulations and eighteen actual landings, I felt I had spent enough hours out there, so back to the desk and hang 'em up again.

I was then considering retirement after the tragic loss of the *Challenger* Shuttle. During a vacation, my branch was turned over to the contractors in 1987. When I returned, we had a new division chief, and he asked me would I stay on for a while and assist him in reorganizing the entire division and help him to understand who certain people were and the capabilities of certain people and all of that. Since I had lost my branch status, I said, "Okay," and I moved in with him and helped him for a while. Then I walked out New Year's Eve, 1988, the end of another chapter in my life, but a super great one that I would always remember.

JOHNSON: Let's go back to the beginning again. I was wondering what kind of equipment you used when you first started with the Space Task Group.

EDMONDS: When I first went to Langley, all they had was eight-by-ten still cameras, eight-by-ten-size film, and [Graflex] Speed Graphics, the kind that all media and everybody used in those days, had a door on the front of it, laid down, and each film sheet was four-by-five in size. Normally, you almost always use the same lens. But for some reason, some lady that was in charge of all pictures that personnel and different people and all wanted, made the decision that you would take in on eight-by-ten-size film if it was just one person. Of course, you had to put it on a tripod, and we had to lug that heavy camera, and it had the film holders that went in the

camera, over to Personnel to take a picture of a person. Sometimes it would be just a head and shoulders picture.

They only had one kind of hand-held movie camera and that was the old original Bell and Howell, and they didn't change many lenses on that, either. That was what we used for a long time. Of course there were not many types to choose from in those days.

They had almost no requirements for photographs from aircraft, so then when we started this flying, these big cameras were just terrible. So we thought we'd try a Hasselblad. I think that's two-and-a-quarter-by-two-and-a-half, the negative size. You can change lenses in them easy, long lens and short lens. Of course, as you know, you have to take in consideration the speed. When you're in a helicopter and you're flying fast so you have to try to be able to get a lens that will open up to take care of that fast speed. Speed and light, that's the two main things. Also you quickly change film packs on the camera when another film type is required.

So we convinced them and we bought some Hasselblads, and I think we had to get Space Task Group to pay for them. I could pack them up and carry two, one for a backup and some lenses and a small case, and carry it on aircraft and everywhere. For all of our aircraft still work, we used the Hasselblads.

Then came the new movie camera, the Arriflex. That was much, much better than the old Bell and Howell. After a lot of hassling, they let us buy a couple of them. So then we ended up using Hasselblads and Arriflexes all the time.

Now, for the instrumentation photography, where you needed speeds anywhere from two hundred to five hundred frames a second, we used a Milliken camera. That was an engineering-type camera. It was all solid. The only thing that extended was the lens extended about an inch or more out of the front of it. Then eventually the company fixed it so we could use longer lens

on it. But back in all the testing labs back on the base, we would set up two and three of the Millikens.

Then I arranged it so that I could use a Milliken with a Hasselblad or Nikon beside it in the aircraft, or a regular movie camera and a Hasselblad, and I'd put two together and hook them up so when I'd press one button, they would both go. That one that you saw, where the Shuttle separated from the aircraft, I had a still and a movie camera on that and pushed one button and took both.

Then that idea became popular, I told you, on the lakebed, where we would have two and three and up to four cameras on a tripod on a plate, and they would all be hooked up pretty well to where you could punch one button, or sometimes you would just reach over and turn the movie camera on and just let it keep running. When you knew it would only be a matter of ten seconds or fifteen seconds or even longer, you'd just start the movie camera. If you had two movie cameras, you could just start both of them, and then both still cameras would be hooked up to one button and then you'd press them.

So that's about what we did in the way of cameras. Hasselblads went all the way through to the end of my retirement. They objected to us getting the Hasselblad, because they didn't want to go down below four-by-five film because they were convinced that you couldn't get good quality or good resolution if you got the film too small, and they didn't want to go down below the old Speed Graphics four-by-five film. Finally, they were convinced that the Hasselblad could provide good quality photographs. Next I tried to purchase some 35mm [cameras] for some of this rough type of flying that we would do and where we couldn't handle anything longer, even a Hasselblad. The 35, you could put anywhere and have it for a backup if you ran out of film and didn't have time to change, or in any type of emergency.

I went over to Space Task Group and talked them into it, and they let me buy two or three, I think, Leicas or Nikons.

One time during a delay in flights, a small group engineers that were in charge of onboard flight cameras and myself went to Europe and started spending four days at the Hasselblad factory and then we went to the Leica plant, and that was interesting. They got lots of ideas and they mostly went with the Hasselblads on most flights, but in some of the smaller capsules, like the Apollo, with three in there, they had some mounted 35mm.

I talked John [W.] Young one time into taking a small 35mm preset camera. Canon came out with its first what we call “point-and-shoot” camera, called Canon Sure Shot. I bought a personal one and got such good pictures. So one day, about two or three weeks before John Young was going to make a flight, I took 8x10 pictures over and talked to him. I said, “John,” I said, “play with this.” It rewound the film and preset the focus. All you did was point the camera and shoot.

He said, “My god, that would be easy. I could stick that in my pocket or anywhere.”

I said, “How about taking it on the mission and trying it out?” And he did, and he came back and he got some good pictures out of it. Where they had to walk around and all, they could stick it in their pocket or they could tie it to them or something like that, and use it.

They may have used one a little, but most of the time they stayed with the Hasselblad and the Arriflex movie camera. Then, of course, nearer toward the end of Shuttle, some of the outsiders, the media and the three-dimension people—what do they call them—wanted us to let them mount their cameras inside spacecraft for filming motion pictures during the missions.

JOHNSON: The IMAX?

EDMONDS: IMAX. That' it. And they made great strides in getting film. They would provide the equipment.

Then cameras were mounted inside the spacecrafts, too, so the fellows would know where certain action that they wanted pictures, so they would mount a camera. Then that helped. The astronauts didn't have to worry about it then.

JOHNSON: The astronauts that were taking the photos, once they were in space, what type of training did they go through, or did your branch have anything to do with it?

EDMONDS: No, we didn't. Well, a little bit out in the field and things like that, but all of their onboard training was done over in another lab where the engineers that were in charge of the cameras, they would train them. They would determine the speed and the f-stops of all the onboard cameras that were mounted. Most of those would be preset. For the cameras they would carry around with them, they would put the speed and other information somewhere with other flight data. Because of the similar size and lighting, the same speed and f-stops would usually be very near the same in all inside areas. We would discuss photography with them on training trips.

I went with them down in the Panama jungle. It was a training flight. Oh, that was something. And we would talk photography. We would have hours and hours in that jungle, just sitting there. We were about four days, three or four days out in the middle of that jungle. We'd sleep in hammocks. We'd install a hammock to two trees and they would make us get in that hammock in the afternoon about an hour before the sun started to go down, and the workers that

were taking care of us, they would come along and cover us up and put straps around us and everything. That would be an hour before dark, and we'd stay in there until the next morning, because the snakes would come out after dark and all of them were poisonous, most of them, and they wanted us to be in the hammocks.

But we had a lot of talking time and we would talk photography. And they were so smart. It was amazing how fast they could pick up something, you know. "You just said that. Don't say it again. I know what you're talking about." [Laughs] We were so used to training ourselves and our photographers and you'd have to go over and over something, but those astronauts were so smart.

JOHNSON: What other places did you go to with the astronauts, as far as their training?

EDMONDS: Another one was out in the Grand Canyon [Arizona], places like that. A lot of those trips were training for them in case they had an unexpected landing somewhere in the mountains or desert. They were really survival training trips.

JOHNSON: I know you mentioned earlier that the film was black and white when you first started out, and then it had to be colorized, of course, if somebody wanted a color portrait. At what point did NASA move to color film?

EDMONDS: I cannot remember when we actually started using color film. Most early color film was the 35 millimeter still camera size and we didn't have or use them for a while. Other sizes and types of color came out but the main reason we were not interested in using them was

because the film speed was too slow. Also we had to have new equipment to process the film, both still and motion picture.

Most all of our requirements called for high speed film, so we had to move slow in switching over. Of course, general documentary still and motion picture coverage was where we first began using color film.

Our engineering [instrumentation] aircraft, chase, zero-G and others still required very fast film and the best F-stop possible in most cases. As the speed and quality of color film increased, the more we used it.

Today many types of color film are very fast and have high quality. Not too many people remember black and white film. People that have discovered it are excited and want to try it. So many things in life we couldn't get rid of and now the new generation are excited over. "Oh, have you ever tried that new black and white film?" [Laughs] Yes, so it's funny.

JOHNSON: They're learning about creativity again.

[End of interview]