



headlines

25 years later, JSC remembers shuttle's first flight

It was Feb. 1, 1981, and I had just been hired to work in the Shuttle Avionics Integration Laboratory (SAIL) as a laboratory engineer and was filled with the importance of the job. I was hired in time for the first shuttle launch, and the feeling I had was overwhelming. I knew I was a part of history, and when I qualified for one of those special "Mission Support" badges that indicated you were a member of the direct mission support team, I knew my eighth grade dream of working for the space program had been fully realized. Even though we were supposed to take the badges off in public, I kept "forgetting" and wore it everywhere. SAIL "flew" with the first shuttle and we watched the launch "on station." It was a grand time!

Doc M. Pepper
United Space Alliance
Computer Engineer



In this March 1981 photo, Space Shuttle *Columbia* is showered with lights at Launch Pad 39A as preparations continued for the first flight.

I was working out at White Sands during the first four missions to support the alternate landing site. It was a very exciting time, a lot of hours and pride in the new Space Shuttle system. The press was there in full force. They had a lot of equipment and personnel working alongside of us during many of the first shuttle missions. We provided TV support for NASA and the media

out at the landing site. It was very busy and we had a lot of fun doing it.
Randy Ross
Systems Engineer

In April 1981, my husband and I worked at Ford Aerospace, he an engineer and me in program office administration. We were both so excited about the maiden voyage of *Columbia*; we were granted special permission to videotape the launch off the Building 30 auditorium feed. At first I thought it would be too noisy from the packed audience that would be viewing from the auditorium, but it actually turned out to be an added touch of unexpected yet delightful drama. After years of watching liftoffs, I find that still to this day there has never been a more ecstatic sound from

a crowd. Years of hard work, frustration, exhilaration and pride in knowing you had been a part of that one successful moment in time could be heard in the video background as the NASA family cheered on *Columbia* and her valiant crew. It's one of those moments you never forget.

Eileen Smith

Having worked on the Approach and Landing test team, it was a time of great excitement and apprehension. Would she perform like she did during testing, or would something go wrong? With the successful launch and landing, we knew we were looking at many more years of progress and development. We were, and are, proud of STS-1.

Jack Baston

USA JSC-Site Services

Information Engineering Group

Internet Applications Developer/Senior Programmer

For STS-1, I was working for the Lunar and Planetary (L&P) Institute in the old Jim West mansion on NASA Road 1. The STS-1 crew used the L&P facilities to debrief after the flight. Because of the media crowd, the road to the "barn" had a chain across the entry road. I volunteered to go out and unlocked the gate to let them in. While John Young was in the facilities, he looked at a 3-D viewer of the moon's surface. Someone asked him if that is what the moon looks like in person. After a short pause, no smile, Young replied, "No." I guess it is one of those "you had to be there" to appreciate the view. Both Young and Crippen signed a picture for everyone in the barn. This is still one of my favorite pictures.

Jim Heldt

Mission Operations Directorate File Server Administration & Desktop Support

I was a branch secretary in Building 44. My branch was involved with the astronaut communications and the cameras in the payload bay and in the orbiter. I had never been involved with work of this type, and everything was new and exciting. It was a wonderful time to be working at JSC -- what an awesome place. Everyone was enthusiastic about their work even though they were working long hours. The day of the STS-1 launch, a large group of us watched the launch in a lab. The orbiter looked beautiful with the white external tank. There was lot of silence in the room as we got close to launch. Some of us had our fingers crossed, and I'm sure others were silently saying a little prayer. The launch was the most beautiful thing I had ever seen. We were all very impressed with the awesome power of the SRBs. I will never forget that day or the excitement in the air.

Patricia A. Peugh

NASA

Secretary

As a contract specialist in the Shuttle Procurement Branch at JSC, I had been working on Shuttle DDT&E for several years (the NAS9-14000 contract with Rockwell International) by the time the first flight actually took place. The First Manned Orbital Flight was the major contract milestone in those days that just kept slipping away -- until April 12, 1981. I remember the tension, the excitement and the thrill as those of us unable to attend the launch filled the Teague Auditorium. We held our breaths and waited; gasped as the main engines and solid rockets ignited; and cheered when *Columbia* began its ascent. I also remember that we were filled with a sense of pride in the team, the agency and our country. It is rare for those of us on the business side of programs to be able to feel such sense of participation in a momentous event. Mary K. Kerber
Barrios Technology
Director, Contracts

Exciting! Working with the first group of STS crew members and a brand new vehicle made each day exciting and different. Every aspect of life at JSC or Ellington Field was one of learning and anticipation. New horizons were a daily event and potential for career growth was built into most jobs at the time. I moved from Aircraft Operations and the Shuttle Training Aircraft at Ellington Field in the mid- to late-70s to the shuttle mockup and 1-G trainers in Building 9 to the Shuttle fixed-base and motion-based simulators in Building 5 and 35 in the early 80s. It was a great time to be a part of the space program, as there was great pride in the accomplishments and initial successes we had as a team. The day STS-1 successfully launched was the best day I can personally remember.
Will Stager
Barrios Technology
Senior Engineer, Russian Vehicles Launch Package Engineer

I came to work at JSC in February of 1981. I had eight years of electrical/avionics engineering experience from three different companies by then when I had the opportunity to work in the Electrical Power System Laboratory in Building 16, and I jumped at it. My wife, 2-year-old daughter and I found an apartment in Webster, and I started learning about the space shuttle's electrical power systems and cargo computers. It was fascinating work, especially for a college student who watched Neil Armstrong and Buzz Aldrin make the first steps on the moon and wished he was there, too. Those same feeling of awe, and now a sense of pride and belonging, riveted me to the TV monitors when the *Columbia* first raised ship in April of 1981. It was a high point of my space faring dreams and a goal that I had since I was 9 years old. And my voyage of discovery continues...
Paul March
Barrios Technology

Engineering Specialist-Sr.
JSC Engineering and Sciences Contract

I had been at JSC for 19 years at the time of STS-1, and it had been about six years since we had launched an orbital vehicle with a human crew! We had had the successful orbiter landing tests, and now it was time to step up and go all the way! I was deputy chief of the Propulsion and Power Division at the time and had detailed knowledge of all the onboard high energy systems and the problems we had encountered during the development and qualification phases. I knew how much propellant and reactive materials were onboard in those systems -- but I was confident we had done our job and were ready to go. Nonetheless, I was "puckered up" when the SSMEs lit up and the SSRMs lit, and off we went! I don't think I breathed for about eight minutes or so until we were in orbit! And the landing was the most beautiful ever! A fantastic experience. Norman Chaffee

I worked in the Mission Control Center "front room" on the orbit (Bronze team) shift as the Computer Control Engineer (CCE). The console was in the trench on the far right hand side of the room. For that first launch, I was one of but a few women actually sitting on console. Each team member had a job to do. We had sim'ed for months, even celebrating the long sims as a team. By the time STS-1 came around, we were a family. Oh, the success of WOW was sweet. Lizabeth Cheshire
NASA
S&MA ISS Avionics and Software Manager

I joined NASA in April 2000 at the old Quality Assurance, Reliability and Safety Office (QARSO), Rockwell-Downey, Calif. I went from not knowing there was such a thing as a shuttle to total amazement at what we were trying to do. I watched them build *Discovery* and convert the -099 test article to a flight article (*Challenger*). I found out what ALT meant (if you have to ask...). When the flying brickyard launched for the first time, I was on pins and needles after having studied the high-temperature insulating tile processes (learning how much we knew and how much we didn't know) and worked all kinds of stuff through Material Review and Problem Reporting and Corrective Action. The one thing I most remember is John Young doing his walk around of *Columbia* after the landing and his gestures -- talk about emotional! There was a definite buzz in Downey those days of STS-1. The one thing that people said was -- it worked! Ron Montague
NASA
NS2/Occupational Safety Group

I watched STS-1 from the living room of a bed and breakfast we were staying at in England. My family was living in the Netherlands that year, and we were on Easter vacation. I vividly remember the launch, and also that our hostess told us that one does not put sugar on oatmeal, and the spoon in her sugar bowl had a big hole in the middle -- just a thin rim was left around the edge and it didn't pick up any sugar! I turned 10 years old the following week, and had no idea that someday I would be an instructor and flight controller for shuttle flights!

Karina Shook
NASA
Mission Operations Directorate EVA Task Group

I started working in Building 4 just five months before STS-1. McDonnell Douglas Tech Services Co. was my new company. My job was to coordinate software changes with the crew, many who still remained from Apollo. What a thrill to meet and work with these historic astronauts who walked on the moon. I helped get the software checked for onboard crew displays before flight. It was a nail-biter on the first launch attempt when BFS would not synch with PASS. That Friday, April 10, we scrubbed and got involved in the software checkout. This was an exciting time because the crew was launching on an untested vehicle, looking like a Disney World castle. Would this new staging system of side-by-side boosters and disposable tank even work? Finally, we launched that Sunday, April 12, ending a six year-long dry spell between Apollo and shuttle. We had many parties after the three-day mission, and we became "infinitely smarter." John McKenna

USA

Yes, I was there for STS-1. I worked on the Shuttle Mission Simulator. I worked with visual simulation. At that time we had a 3-D landing model of the Edwards landing site. A probe allowed the eye point down to a scaled landing height with the image relayed via TV. For later flights we used advanced digital image generation housed in racks of special-purpose hardware. Today you can use PCs to generate out-the-window scenes.

Tom Henderson
NASA-JSC (retired 1998)
AST, Aerospace Engineer

About 60 years ago a boy
Unknown of an unknown small village
Looked to the sky high above
An unknown feeling of voidness
Created an emptiness in heart and mind

That is to be the boy still unknown
Came to a place destined?
to see that was STS-1 ?
Himankush Saha
SAIL Software Application

Pressure was very high in the days prior to the STS-1 launch. I was very upset by vivid, recurring dreams of the vehicle exploding on the launch pad. It's not something that anyone would like to talk about in those pre-launch days, but when I did mention them to one of my coworkers, he confessed that he was having these dreams also. I wonder if others had the same problem. Incidentally, after my discussion with my coworker, the dreams ceased.

Gary Raines
Retired NASA Engineer
Engineering Directorate, Avionics Systems Division

For STS-1, many of us who were part of the engineering team were glued to a TV with real-time feed from Mission Control. This link kept us informed of the detailed progress of the mission, as seen from the ground, with the observations of the two astronauts onboard. I remember spending every minute in the Thermal Technology branch chief's office with many visitors, such as the orbiter chief engineer, visiting to discuss our worst fears. I was an engineering analyst who had been working thermal protection since 1973, through the development and design of the hardware. Although we had analyzed every load, through every scenario, we were not able to perform true combined loads testing of the vehicle's entry heating protection. This would have alleviated many of our fears, but the vehicle was too large, and the combining of loads too complex for ground simulation.

Bob Maraia
JSC
Technical Assistant in Engineering Business Integration & Operations
Office

Twenty-five years ago at JSC, desktop PCs were only a dream of the future, CPUs were only four-bit processors running DOS, and the only computers were dedicated to the Mission Control and status of Voice, Command and Telemetry to the Shuttle. There were many communications loss of signal areas in the world that the shuttle would have to fly through, and ground radio stations tracked the shuttle to maintain communications. To see her was a marvel, as STS-1 "*Columbia*" gleamed in the sun on the pad at Kennedy Space Center with its white painted tank while technicians tested and retested both prime and backup systems for every possible scenario to guarantee a successful flight. The news crews were everywhere, and specific STS-1 badges were issued for access to the

critical MCC mission work areas. This new shuttle was a crowning glory, and all of America was proud. Let's do it again. Howard Meyers
Ford, Bendix, Allied Signal, United Space Alliance and Lockheed
MSOC Hardware Engineer

Working at JSC prior to and during STS-1 was the highlight of my career. It was such exciting times being a part of the team. We had a host of dedicated, motivated and hard-working folks committed to getting the shuttle off the ground. I was one of eight secretaries working in the Astronaut Office at that time. I had a group of super astronauts that I was assigned to work for. Each time there was an upcoming mission, a secretary was assigned to work solely with the crew. As crew secretary, I had the opportunity to work many of the earlier launches at Kennedy Space Center (KSC). In fact, I worked with the crew that performed the first shuttle landing at KSC, and that was an awesome moment for me. During STS-1, we spent many long hours working toward the goal of getting the first launch off the ground. There were many delays and setbacks, but the crew/team worked endlessly to get the job done. The day we finally launched...the mood in the office was total jubilation. I was very humbled and blessed to have been a part of that awesome team.
Mary Gibson
JSC
Administrative Assistant

On April 12, 1981, I was in the Technical Support Procurement Branch located on the fifth floor of Building 45. I was a buyer assigned the Ford Aerospace MCC contract. STS-1 has a special meaning to me twofold: 1) it was the first spaceflight of my civil service career, and 2) it returned on my birthday, April 14. Now I'm still supporting the space program, but as a JSC contractor, hopefully for many years to come.
Robert L. Mueller
Oceaneering
OSS Contracts Manager

I was only 21 years old and had just started working with Singer-Link. At that time, I was a clerk assisting George Tilley and Paul Kennedy with any typing and filing that was required in the Powers Building (1120 NASA Road 1). When STS-1 launched, there were tears and screaming with excitement. People had worked very hard to get the program to this point. When I started working with the organization, I did not understand the significance of our work until STS-1 launched. Everyone was gathered around a TV set watching history unfold. It was absolutely breathtaking, and still brings tears to my eyes.
Mary M. Reyes
ARES Corporation
Technician III

My first job out of college was for Singer-Link in May of 1980, working as a software engineer on the shuttle simulator in Building 5. Although my wait for the first flight was relatively short, I remember others complaining about it taking forever. I found the following graffiti in the bathroom one day: "Eons pass, galaxies die, will the shuttle ever fly?!" And when STS-1 did fly, a lot of pent-up anxiety and excitement was released. There were lots of parties and celebrations. The thing I remember most was a feeling of pride, a pride in a group having achieved something that mattered.

Charlie Randall
Cimarron – Boeing Tower II
Systems Engineer

STS-1 was long awaited, and the atmosphere was one of anxious anticipation. We knew the new Flight Control team was trained, and we hoped they were ready. I remember Ed Fendell (Apollo's Captain Video) remarking that "a good acne epidemic" could wipe us out. The front room PROP guys were Apollo veterans, but the back room positions were mostly rookies. Those STS-1 rookies -- Wayne Hale, Bill Gerstenmaier, Ron Dittmore, Tony Ceccacci, Charlie Young, Rich Jackson, Jim Oberg, Lonnie Schmitt -- did just fine.

Denny Holt
NASA
Head of Propulsion System Section, Guidance and Propulsion Branch

My name is Dave Hanson. I was a co-op in 1981 during STS-1. A group of us were asked to be the thermal plotters, graphing temperatures measured under the shuttle tiles, and we were faster at it than the computers of the day. We were all very excited to be contributing to the first shuttle mission in Mission Control. And some of us are still here!

Dave Hanson
NASA
Crew Language Training Manager, Mission Operations Directorate Export Control

Exciting! For years the Microwave Scanning Beam Landing System (MSBLS) NASA and contractor team had been designing and fabricating the system, testing, analyzing and resolving problems and conducting ground and flight tests of the system for about a year at Dryden Flight Research Center at Edwards Air Force Base to make sure its performance was within specifications throughout the coverage volume. We supported

the shuttle Approach and Landing test flights. We were right beside the shuttle takeoff runway when STS-1 landed, and simultaneously one of the T-38 chase planes flew over our heads. It was a beautiful and thrilling sight...a gratifying climax to our years of dedicated and successful teamwork.

Jim Lamoreux

NASA/JSC

Job title (then): MSBLS Ground Station Subsystem Manager

Yes, I was there for the STS-1 launch, and it was fantastic! What an ecstasy of joy and pride everyone was in at that special moment! I joined Computer Sciences Corporation as a programmer in the summer of 1980, just in time to witness *Columbia's* historical debut. My group supported MPAD for Tactical Air Navigation software maintenance and data analysis. We worked day and night. The air was filled with such determination. One afternoon Bob Crippen, the STS-1 pilot, paid us a surprise visit. He delivered kind words of appreciation and presented to us the autographed crew portraits featuring him and Commander John Young. Wow, how that heightened our morale! Twenty-five years have passed. NASA has seen ups and downs. Yet, passion remains and enthusiasm prevails. I was proud then to be a part of STS-1, and even prouder today to be a part of this challenging spaceflight era.

Shiow-Jiin Jean Hsu

United Space Alliance

Computer Science staff

During the launch of STS-1, I was an instructor in the Crew Training Division and had helped train the crew and the flight controllers during innumerable hours of simulations. Several of us watched most of the mission from the Simulation Control Area near the Flight Control Room in the Mission Control Center. It was a picture-perfect launch, book-ended by a picture-perfect landing. In between, there was some amount of consternation due to some tiles coming off the back of the vehicle, but of course everything worked out fine. After the landing, we celebrated the rest of the day, and the local bars were filled with NASA folks and reporters, all eager to talk to one another about the day's success. A couple of us even ended up on the ABC Evening News (albeit in the background during someone else's interview). What a glorious day!

Dennis Beckman

NASA/DT12

Manager, Shuttle Training Office

Graduating from The University of Texas in December 1980, my choices were to move back to dry west Texas to work for the local power company or to come to humid Houston to be part of the new Space Shuttle Program. I came to JSC in January 1981; just months before *Columbia's*

first launch, to perform analytical simulation of the orbiter active thermal control system. It was an exciting time, especially for someone just out of school. Before the STS-1 launch, the crunch for my team was to complete final contingency analyses of faults such as loss of orbiter cooling loops. We analyzed many worst cases to ensure there were safe ways to bring the crew back from foreseeable contingencies. After the flight, we received a load of system performance data and used it to improve our simulations. I supported 25 shuttle flights before moving to space station and exploration work.

Paul Campbell
Lockheed Martin
Project Manager

I was only 10 years old, but remember it like it was yesterday. The band Rush captured the event in a song, which says it far better than I could describe. Song: "Countdown;" album: "Signals."

Derek Green
Barrios Technology

What an exciting time for me, as I have worked in MER doing reports, and it had been a dry spell since the last Mission Report. Many simulations were being conducted in the MER, as well as preparing outlines for the anticipated Mission Report. My memories mostly are about the anticipation of the first flight of shuttle.

Bob Fricke

While at the Clear Lake Regional Hospital anxiously waiting for the birth of my son, I was also anxiously waiting for the launch of Space Shuttle *Columbia* on April 12, 1981. A new era of spaceflight was upon us, and I was so proud to be a part of the overall effort that allowed NASA to get to this historic day. As a Northrop Services engineer working in the ES Structures Test Laboratory, I was involved with thermal testing of the orbiter blanket, tile and carbon protection systems. Many hours were spent running re-entry environment simulations to determine the heat load characteristics of these systems and how well they would protect the orbiter's metallic structure. The true test was about to happen, and the excitement of being a part of the team that got NASA to this point was somewhat overshadowed by the pending birth of my son.

Don R. Wilbanks
Jacobs Sverdrup
Project Engineer

It is very difficult for me to accurately describe today what my thoughts were at the time of liftoff of STS-1. My best summary of my feelings was that I had confidence in the success of the flight because of the flight crew, flight control organization and engineering and safety and quality assurance organizations that were available to me as the orbiter project manager. I also felt that we, the shuttle team, had done a very sound technical and managerial job in fulfilling our obligations to the country. There were many technical, managerial, contract management, public relations and legal challenges we had faced over the past several years. Some persons doubted if the systems, such as thermal protection, flight control, propulsion and many others would perform as designed. Chris Kraft summarized the situation very clearly after STS-1 landed by saying over the net, "We are infinitely smarter today." But having said all this, I must confess that I also was scared, nervous, excited, proud, anxious and found comfort in puffing on my pipe!

Aaron Cohen

Retired

Orbiter Project Manager (August 1972)

On April 12, 1981, my name was Peggy Nelson and I was employed by Singer-Link (NASA contractor at that time). We were the development contractor that built the initial Shuttle Mission Training Facility (Buildings 5 and 35). I was a software engineer for real-time and offline support software, including SMS panel pages. I supported operations in the training of the STS astronauts. Even though we all worked long hours at any and all times of day seven days a week, it was exciting. The atmosphere was electric the day of the launch. Everyone was on pins and needles. Good times!

Peggy Askew

United Space Alliance

Computer Science Staff V

I was in the Mission Control Center (MCC), but not in the Flight Control Room or even a back room MSPR. No, because I was working a highly classified task, I was in a hidden, secure room with four others -- two who were non-NASA. This can now be legally discussed because our non-disclosures were binding for only 10 years, but I don't have space for details here -- suffice to say we were dealing with classified systems, and the pressure to achieve critical results was huge. But we WERE successful and actually were responsible for setting the exact STS-1 launch time, which had to be adjusted late in the countdown. "Nervous" is not the word for everyone in the MCC, not because of our top-secret activity, but because it was the first launch of the shuttle stack, not preceded by ANY unmanned test launches -- the tension and anxiety was far greater than on the Apollo 11 lunar landing!

Ken Young

NASA (MPAD) retiree

Part-time consultant

I spent almost two years training to be a front-room Electrical General Instrumentation Lighting (EGIL) flight controller for STS-1, and prior to that was in Engineering, responsible for the design of the orbiter electrical power distribution and very excited to finally see all that effort finally launch. This was the first time a spacecraft was launched manned for the first flight, and because of this we had tried to simulate all the contingencies during our training, as we didn't know what to expect. I was assigned to be the Orbit EGIL, and was not on shift for the launch, but watched on TV at home, and nervously waiting to get to the Mission Control Center to participate, as watching was killing me. Fortunately, handover from Ascent EGIL Bill Moon had no problems, and my team members -- Dennis Webb, Instrumentation, Dick Brown, EPS and Jerry Pfleeger, Power Manager -- were eager to get to work.

Gary W. Johnson

Retired from NASA JSC S&MA

At the time, I was employed by Singer-Link Corp. as a production processing operations supervisor in Buildings 5 and 35. My job was to supervise the activities of the computer operations and media control areas for the flight simulation group, who trained the astronauts for the space shuttle. Working with and around Young and Crippen was both fun and interesting, as they each had their own different personalities and likes. When Launch Day came, we were all huddled in the Building 5 Conference Room, cheering and praying as STS-1 lifted off. We felt as if we were going with them on that flight. It was beyond words -- it was fabulous!

Cliff Fowlkes-Garcia

Cimarron, Inc.

Video Controller

I am Leon Ballinger and now live in Wimberley, Texas. I worked at JSC on several programs. I worked out of the Apollo Program Office on the Lunar Excursion Module. My next job was with the Earth Resources Office. My final job at JSC during STS-1 and prior to retirement was doing Payload Integration on the shuttle. My primary payloads were United States Air Force (USAF) payloads. The job was made extremely tough due to two reasons: 1) As the primary interface between two very big egos (USAF generals and NASA management/astronauts), and 2) the requirement for secure interface and operations for the highly classified USAF payloads. I enjoy playing golf and traveling around the United States in my RV much more.

Leon Ballinger

Retired

I worked in the Shuttle Program Office, Mission Integration Office, as administrative assistant for Al Bishop and Buck Gay. We had the landing group in our office, and I was fortunate enough to get to go to Edwards Air Force Base to work the landing of STS-1. It was the most thrilling thing I have ever seen. I was standing on the lake bed when the shuttle came into view and glided down to Earth. Goosebumps came up and tears fell when the shuttle touched the ground for the very first time. Working at JSC at that time was exciting and fulfilling.

Linda Sauter
Retired

I was one of the team leaders for the Thermal Monitoring Team (TMT), a group of new hires, co-ops and contractors who were responsible for monitoring the temperature sensors that were located underneath *Columbia's* thermal tiles. There was a lot of concern about the tiles falling off, and the TMT's job was to hand-plot the data from the temperature sensors and relay it to the flight control team, who would then use the plots to try and locate any areas where a tile might have fallen off. The most exciting part of the flight was when we were invited to come out to the front room of the Mission Control Center and watch the crew egress from *Columbia*. Later that day, I loaded some of the team into the back of my pickup truck and drove them to a "landing party." It was pretty exciting stuff for a kid just out of college.

Mike Engle
NASA
International Space Station Program Integration Office

When STS-1 launched, I was at Kennedy Space Center watching it lift off. I had traveled to the cape to see the scheduled April 10 launch, and stayed for the actual launch on April 12. Fortunately, I picked up a JSC bus pass, so I was with the group from JSC that obtained VIP launch passes. I still vividly remember watching in awe as *Columbia's* three main engines and the SRBs lit up the sky, giving birth to two new suns, hearing "We have liftoff!" and being engulfed with the body-shaking, heart-pounding roar of the launch shortly afterwards. Oh, what a memorable day! The next day I flew to LAX, drove to Edwards Air Force Base, spent the night on the lake bed, claimed my territory for my camera tri-pod on the flat top of a trash dumpster, heard and felt the two sonic booms and watched the Space Shuttle *Columbia* gloriously land.

Matthew Nelson

After completing Ground Based Shuttle Systems (GBSS) software development as a programmer for the Approach and Landing Test, I was the manager of a software development department at IBM Federal

Systems Division that was responsible for developing the first reconfigurable software tables that were used in GBSS for the first flight of the shuttle. We spent many late hours in Building 30 checking out our software to ensure it would run flawlessly during the first mission. We also developed the first overall software for the operation of the Payload Operations Control Center.

Jim Phillips
Cargo Mission Manager

I started studying the space shuttle in March 1969. I worked on it from the paper studies, the design, the building, testing and the flying of the vehicle. I went from heading engineering to become the deputy project manager. I remember the day it landed safely. We spent the rest of the day celebrating the event with a dinner with Chris Kraft, Max Faget and Aaron Cohen at our favorite restaurant, Ellis'. That evening I come home and finished my income tax. Much later I received a letter from the IRS saying I owed them \$300. When I reviewed my return and found all the mistakes I returned a revised return. They returned me \$3,000.

Milton A. Silveira
Retired

I was working on the project for Single System Trainer in Building 4. One of our tasks was to process information from the Shuttle Training Aircraft (STA) in the STA Reduction System. My wife and I had taken a train trip to see the bluebonnets and visit friends in Temple, Texas. I answered a phone call and learned JSC had received some half-inch magnetic tapes from late STA runs at Kennedy Space Center. The runs had ended unsatisfactorily because of an indication of premature touchdown. We returned on an earlier train, which arrived in Houston at 10 p.m. the night before the actual launch. I drove directly to JSC and performed the data reduction of runs from the 10th. C. Connolly Perry reviewed the information from these runs about 4 a.m. the morning of the launch. He concluded that a new paint job on the STA was the cause of the misleading information, and the flight went on as scheduled.

Clark P. Wright
OS Development
Mission Support Operations Contract
Lockheed Martin Space Operations

This was my first "console position." The name of the console position was Network Interface, and we were responsible for the pre-processing of shuttle telemetry. We were also responsible for shuttle commanding. This console was located on the first floor of Building 30. I have been supporting shuttle flights since then, with no break in service.

Frank A. Stolarski
Ground Control

During STS-1, less than 10 non-flight critical tiles were lost with no damage to *Columbia*. Even though they are low-strength and fragile as eggs, the tiles have performed superbly for all Shuttle missions. The current challenge for the tiles is the potential ascent debris environment, for which the tiles were not designed nor certified. Having worked on the Shuttle development from “sketch pad to launch pad,” the STS-1 flight was the most rewarding event of my career.

Tom Moser
Former JSC Director of Engineering

After being drafted into the Flight Operations Directorate in 1979, I became assigned to the Orbit2/Entry Team for STS-1. The team was led by Crimson Flight, Don Puddy. The Crimson Team also served as the Tanking Team in the MCC during the late hours of the countdown. On flight day, I remember staying in the backroom to watch that first launch. What normally took just two minutes to reach 10 miles when the solids burn out and separate actually seemed more like an eternity on that first launch. For the STS-1 Entry Team, my job was to send commands prior to the deorbit burn to configure several experiments for entry. These experiment packages were used to characterize the acoustic, vibration and contamination environment of the shuttle during flight and reentry. It was an awesome experience to be part of the STS-1 flight control team, and an incredible honor to be a part of NASA at that time in history.

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