

Roundup

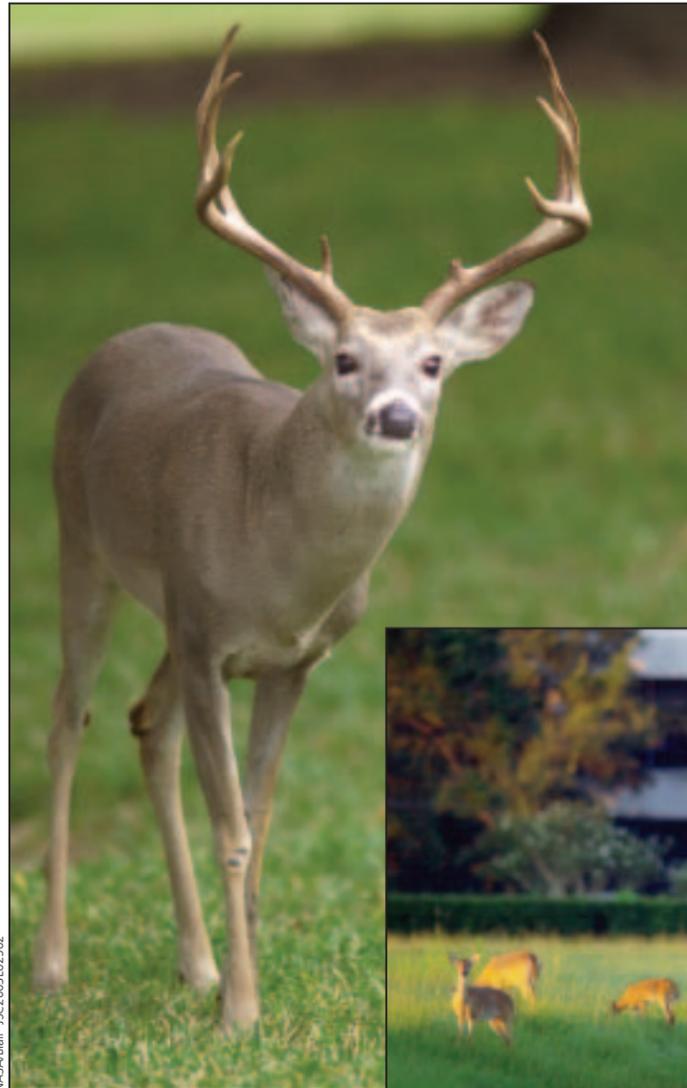
SPACE CENTER ROUNDUP

Lyndon B. Johnson Space Center

Not exactly reindeer, but...

Since Johnson Space Center opened in 1961, employees have been lucky to share the grounds with white-tailed deer. Currently about 200 of them roam the site and are now in their annual "rutting" or mating season. This activity results in increased movement of the deer and increased aggressiveness, particularly on the part of the antlered deer (bucks). Because the bucks have been raised near populated areas, they have very little fear of humans. When in rut, the bucks can become dangerously protective of their territory and may confront or even attack humans who intrude upon their space.

JSC employees are reminded to use extra caution when driving on site, especially during the twilight hours of dawn and dusk. Joggers and runners on trails or streets should avoid areas where they observe the presence of any deer, even does, because where there are does, bucks are probably near. Whether walking or running the trails or driving the streets, be aware that conditions are such that extra care should be taken. Please be careful!



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Space Center Roundup

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Artwork © Pat Rawlings, 1992

Building memories

Just as future astronauts could someday be building memories on Mars the personal journeys of today's space explorers are being archived with the help of JSC's Oral History Project. Read how the inspiring stories of NASA are being preserved for future generations on pages 6-7.

January
2005
Houston, Texas

Beak sends...

A MESSAGE FROM CENTER DIRECTOR LT. GEN. JEFFERSON D. HOWELL JR.



En garde!

I took great pride in being an officer of the Marines. However, the driving motivator that kept me in the service was the opportunity to fly fighter aircraft. I had several tours of duty in the Pentagon and other places that I didn't particularly care for [an understatement], but the lure of returning to the fleet and getting back into the cockpit was the carrot that kept this donkey sauntering down the military career path.

I obtained incredible pleasure flying jets, each and every time I did it. An interesting aspect is that the more difficult or "hairy" the mission, the more satisfaction derived. Many was the time that I would be back in the ready room, feeling like a million dollars after scaring the heck out of myself in an aircraft only an hour or so earlier. Whether it was almost hitting the ground or another aircraft, or being shot at and missed by the enemy in combat, the thrill of it all was, in the words of the MasterCard commercial, "priceless."

I don't think my attitude was much different from that of any other fighter jock. If you didn't feel that way, you couldn't stay in the fighter business very long. You wouldn't be able to sleep at night.

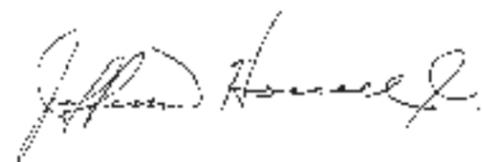
Looking back on the experience, I realize that not many of the mishaps that our flying units experienced were associated with the difficult, high-risk aspects of the flying missions. Most of the losses of men and machines caused by pilot error were suffered during the routine parts of flying, usually in formation, while returning to base, or while in the landing pattern. We also tended to have a rash of accidents following periods of inactivity, such as long weekends or holidays. Why was that?

I believe it's because people in high risk activities have a tendency to drop their guard while doing routine things, particularly following either unusual or exciting activity, or long breaks in which they have been off the job. In both cases bad things happen because of a lack of needed intensity and attention to the task at hand.

We have just returned from the extended Thanksgiving/Christmas/New Year holiday season. Hopefully, all of you have had an opportunity for some rest, relaxation and family activities. It is now imperative that we clear out all the mental cobwebs that might have accumulated during this time and get "back on the step."

We are in a high stakes endeavor in which the consequences of lack of attention or dropping our guard could be catastrophic. We cannot allow that to occur. We must set the example in being vigilant, correct and paying attention to detail in everything we do, during every minute of every day. That's what it means to be in Human Space Exploration at JSC.

EN GARDE!



NASA will forever be in the history books. Here at Johnson Space Center, the JSC Oral History Project team is working to ensure that even the finest details of our personal journeys in space exploration are being preserved for future generations.

Capturing history... one memory at a time

by Catherine E. Borsché

A front view of the Apollo 14 lunar module Antares, which reflects a circular flare caused by the brilliant sun. The unusual ball of light was said by the astronauts to have a jewel-like appearance. At extreme left, the lower slope of Cone Crater can be seen.

Capturing history

“The goal of this project, which was established in 1996, is to capture history from the individuals who provided the country and the world with an avenue to space and the Moon,” Rebecca Wright, project lead for the JSC Oral History Project, said.

The JSC Oral History Project has achieved much success in turning this vision into reality. Already, historians have talked to 435 individuals in 525 different audio sessions. During these sessions, participants who have served in key roles during Mercury, Gemini, Apollo, Skylab and Shuttle programs share their personal experiences regarding their service to the space program. Topics and questions for the interviews focus on the historical contributions of that individual, but they also gravitate toward various memories and stories that are truly one-of-a-kind.

“The first thing we do when we’re given a name to interview is research,” Wright said. “We use the research so that we can do an oral history to help facilitate the interview. It makes the participants feel good that someone’s researched them, and we are able to lead them through and try to get as much detailed information as we can. Some are very technical and want to still talk about the technical work that they did. Some are very reflective, so the material ranges that we get back from them.”

The interview process is described by Wright as informal. Most interviews take place in the Oral History Office with simply a table, chairs and audio recording equipment. The interview is very conversational in format.

Many common themes take shape in the interviews.

“We’ve had some really emotional times,” Wright said. “Almost all of them talk about how space exploration isn’t accomplished by one individual; it is accomplished by a team. Neil Armstrong made the comment that thousands of people come together to make a mission successful. It’s always rewarding to hear about the teamwork and camaraderie that they have.”

Other topics often brought up are the importance of community and the passion behind employees striving toward a national goal.

The JSC Oral History Project is given an annual comprehensive goal of approximately 40-50 interview targets. However, competing influences such as scheduling conflicts, illnesses, the ability of the participant to travel and family priorities often shorten the list. In actuality, the project averages 25-30 interviews each year.

President John F. Kennedy in his historic message to a joint session of the Congress, on May 25, 1961 declared, “...I believe this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the Earth.” This goal was achieved when astronaut Neil A. Armstrong became the first human to set foot upon the Moon at 10:56 p.m. EDT, July 20, 1969.



“The highest priorities are those actuarially at risk, such as Moonwalkers and those who orbited the Moon, and then it ripples out from there. Starting in 1997, we put together what is really sort of an annual wish list,” Bill Larsen, JSC historian, said. “But we always have eyes bigger than our tummies. You have to be that way, because some people aren’t going to be available that you’d like to see on the schedule.”

The project has interviewed well-known NASA icons such as Neil Armstrong, Maxime Faget, Eugene Kranz, Steven Nagel and Walter Schirra. In addition to the recognizable names, many special groups have been interviewed to collect their distinctive views on NASA’s history.

“There’s a group on the JSC Oral History Project Web site called HERSTORY, which highlights the women who have made significant contributions throughout the history of NASA during times when, essentially, it was otherwise all guys,” Larsen said.

Other interesting projects include a book titled Shuttle-Mir: The United States and Russian Share History’s Highest Stage, by Clay Morgan. The book includes many oral histories of those involved in the Shuttle-Mir program.

A more sobering job was a large collection of interviews done during the Columbia recovery effort.

“Some of the managers in Lufkin believed that something needed to be recorded to capture the camaraderie, the support and all the workings going on there,” Wright said.

“We talked to everyone from the Department of Public Safety to sheriffs to county judges to volunteers,” Larsen said. “It really empowered us to know that we could mobilize this kind of recovery effort, and we are trying to put something together that reflects that. There are some really inspirational stories that needed to be shared.”

The JSC Oral History Project does more than just collect oral histories. The project also transfers existing interviews, press conferences and related materials from obsolete or decaying media to compact disc. To date, more than 460 “rescues” of old tapes have been completed.

To learn more about the JSC Oral History Project and to view the interview transcript archives, visit http://www.jsc.nasa.gov/history/oral_histories/oral_histories.htm.

Just moments following ignition, the Space Shuttle Challenger, mated to its two solid rocket boosters and an external fuel tank, soars toward a week-long mission in Earth orbit. Note the diamond shock effect in the vicinity of the three main engines. Launch occurred at 5:00 p.m. (EDT), July 29, 1985.

Ellington Field

A JOURNEY THROUGH HISTORY

by Johannes T. Ragin

IT'S HARD NOT TO NOTICE. Yet at the same time, one simply forgets the importance of the consistent hum of planes that go in and out of Ellington Field.

Ellington Field has long been an economic, military and civil staple of the space program. The importance of Ellington Field began back in 1917, the year it was first established. With the invention of the Wright C. Flyer in 1903, The War Department realized that powered flight had many military applications. When World War I broke out, trained pilots were in high demand. To meet this demand, Ellington Field was constructed in September of 1917.

"If it weren't for the military, Ellington probably wouldn't exist," said Mitchell Polt, International Space Station payload integration manager for United Space Alliance and Ellington Field flight instructor.

The land that Ellington encompasses today was purchased from Dr. R. W. Knox and the Wright Land Company about 25 miles south of Houston.

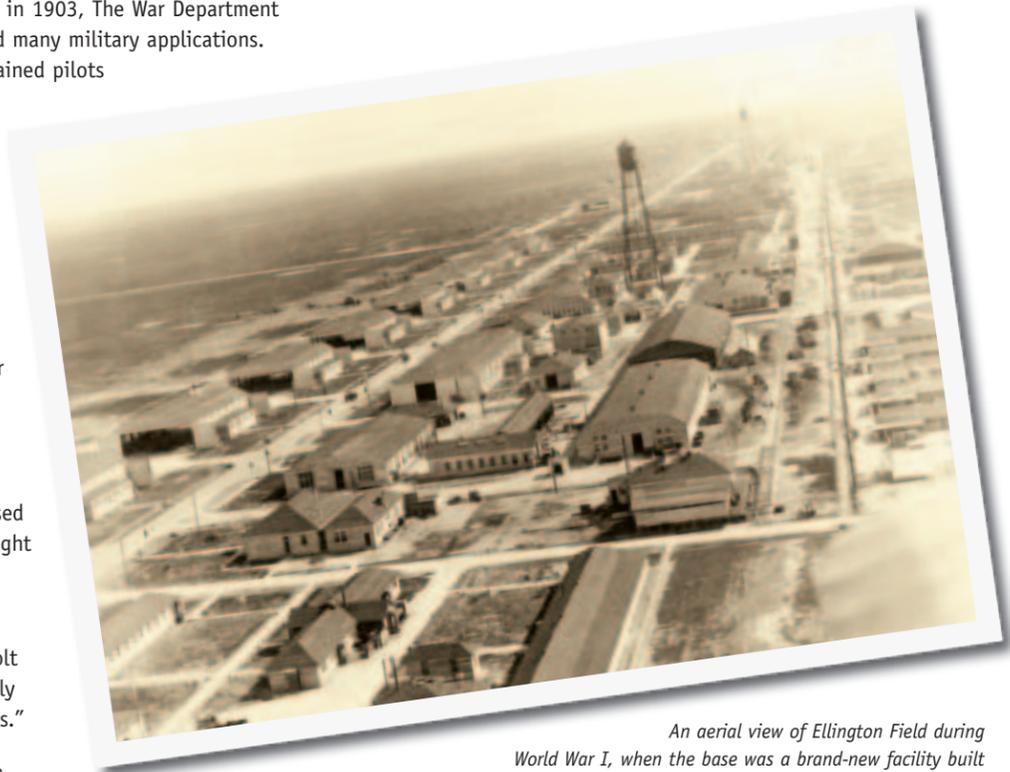
"Ellington is an old airfield," Polt said. "Back then, it was certainly considered out in the boondocks."

However, as the city of Houston began to grow and spread outward, Ellington Field literally grew into the city's own backyard.

Ellington Field was named after the late Lamar Ellington, who lost his life in a test flight at the North Island Army Aviation School in California.

With World War I coming to an end, Ellington Field deactivated as a military base. Nevertheless, Ellington adopted the 111th

Air National Guard unit on June 29, 1923. The War Department realized the American troops sent to World War I were ill equipped and poorly trained. As a result, National Guard units were being established around the country to keep peacetime soldiers combat-ready. The 111th Fighter Squadron then moved to the Houston Municipal Airport and Ellington went out of operation for 12 years.



An aerial view of Ellington Field during World War I, when the base was a brand-new facility built 25 miles south of Houston.

As Americans were drawn into another world war, airfields were once again in demand to prepare soldiers for combat. Ellington was then rebuilt to support the 69th, 70th, 71st, 72nd, 74th, 75th and 76th Fighter Squadrons. Ellington was also the site for the first Bombardier School, which was responsible for training 28,000 bombardier pilots a year.

When the Air Force broke off from the Army in September 1947, Ellington Field was renamed Ellington Air Force Base. After World War II, Ellington was home to the only U.S. Air Force Navigator Training School. Ellington remained an active air force base until 1959, when it made the transition into an air force reserve facility. During that year, the Air Force Reserve and the Air National Guard were the only units conducting flight operations out of Ellington Air Force Base.

NASA became a tenant of Ellington in 1962. In 1984, the city of Houston purchased Ellington Air Force Base and renamed it Ellington Field. From that day forward, Ellington supported civil and military operations. It has also been home to many different businesses and government agencies.

"After the city of Houston took possession in the mid-1980s, I saw activities at Ellington increase. Between NASA, the Texas Air National Guard, Coast Guard, Army aviation, Continental Express, United Parcel Service (UPS) and general aviation, there was a lot of activity going on there!" Polt said. "I was sorry to see Continental Express and UPS leave, but I'm hopeful that general aviation activities will continue to grow."

Today, Ellington Field is very important to NASA's success as an organization. NASA and contractor employees report to Ellington daily to support NASA aircraft operations. The bulk of NASA's aircraft are kept and maintained at Ellington Field.

NASA astronauts also conduct training exercises out of Ellington. The main jet aircraft used for astronaut training is the T-38N.

"We use this aircraft primarily for syllabus training, to train the new people and to keep the experienced proficient. As crews get ready for flight, training exercises are intensified," said John Starnes, aviation safety and program manager.

Ellington is run much like the rest of Johnson Space Center.

"At Ellington, we follow the exact same safety procedures that they do at NASA. As an Agency, we follow Office of Safety and Health Administration standards," Starnes said.



NASA 573-30625



NASA 573-30627

With fighter planes stationed in the background (top), World War I soldiers gather at Ellington Field.

Ellington Field was established in 1917 due to the high demand for trained pilots in response to the war.

NASA aircraft at Ellington have to be constantly maintained. The maintenance of the aircraft brings up safety issues that do not have to be addressed at JSC.

Starnes notes that as long as NASA is around, NASA's presence will always be at Ellington Field. This small airport, though not much in the limelight, is vital due to the services it provides to the community and NASA's space program.

Protecting the NASA family

New Protective Services Division Chief strives to safeguard JSC people and resources

by Jenna Mills

Johnson Space Center welcomes a new division to the NASA family – the JSC Protective Services Division (PSD), which is now part of the Center Operations Directorate. This new division encompasses Security, Counterintelligence, Export Control, Travel and the Office of Emergency Management and will be able to more effectively protect JSC and its employees.

Each group at JSC has different protection needs. For example, the Space and Life Sciences Directorate's Genesis project has special access control concerns, while the White Sands Test Facility requires design assistance with a new security gate.

"Our goal is to protect their environment, so they can focus on doing their jobs and the nation's work without worry," said PSD Chief Alan Mather.

Mather brings with him the experience to handle the responsibilities of his new job. Prior to his arrival at JSC, Mather spent two years as the center chief of security at Stennis Space Center, where he helped to create a comprehensive security program.

PSD has implemented new security changes at JSC to make things safer and more efficient for everyone. Some of these new changes include access control to the Sonny Carter Training Facility (SCTF) that will be tied to the same system

at JSC, canopies for inclement weather at security gates onsite and a non-emergency security information line at x22222 that employees can dial, even from Ellington and SCTF, for questions about badging, exports, counterintelligence, travel and other issues.

"We're striving for a safe and secure environment," Mather said. "We have people and operations that we're trying to protect."

PSD is also on board with perfecting the OneNASA Smart Card project. The Agencywide goal is to have all NASA badges linked electronically. In the future, a chip could be added to the badge for computer log-in, access to buildings and biometric info such as fingerprints.

"The smartcard technology offers a tremendous capability, but the project is replete with many challenges," Mather said. "In the near term, though, NASA will adopt a different badge template with a new look and each JSC employee will receive a new badge."

PSD is eager to do things better, faster and more securely. To do that, they have worked with the Information Resources Directorate to design and beta-test the Personnel



Protective Services Division Chief Alan Mather

"We're striving for a safe and secure environment. We have people and operations that we're trying to protect."

Reliability Program. This program will provide a quicker system to track medical, security and human resources information on employees.

Another project is the Electronic Questionnaire for Investigation Processing, which is now up and running. This Office of Personnel and Management project is a Web-based program to run employment suitability investigations, background checks and security clearances.

"No longer do people have to stop by an office and pick up paperwork, but simply log in and fill out their security questionnaires online at their convenience," Mather said.

Not only will Protective Services increase security measures, they also provide International Services, including Export Control, Counterintelligence and International Travel. Export Control is about more than shipping, Mather said, although PSD does check whatever is sent out for safety compliance. PSD also handles threat briefings and educates employees about security while traveling abroad.

The JSC Travel Office manages the travel contract and obtains all the visas, passports and documentation required for foreign travel.

The Office of Emergency Management, another branch of PSD, is also taking part in making JSC a safer place to work. The office is now running sophisticated training exercises in the event of an emergency onsite – for example, a confined-space rescue or tram accident.

Employee suggestions are encouraged by PSD. Mather said that everyone should take part in protecting the Center and its employees.

"We're all in this together," Mather said. "We all should be involved."

If employees have ideas or suggestions about how to make JSC a safer place to work, they are encouraged to let PSD know by contacting the Security Information Line at x22222 or by contacting Mather directly.

"It's a two-way street. We let them know what we're doing differently and listen to their needs as well. We want to fit in and be a part of their team," Mather said.

For more information about Protective Services, please visit their Web site at <http://www4.jsc.nasa.gov/scripts/org/ja/js/index.cfm>.

The secret to successful spaceflight missions

'Can do' attitude with safety in mind

by Mike Fincke

I am glad to have just returned safely from an exciting adventure in space to the open arms of my family – including my NASA family here at Johnson Space Center.

While aboard the International Space Station, Commander Gennady Padalka and I enjoyed each and every day and we felt a joy in our work. The views of our magnificent planet were particularly motivating – we cruised along the Amazon River, spotted the pyramids, counted hurricanes and had a chance to see many of the cities humankind has built upon the planet.

We both felt we had an especially close relationship with the mission control teams here at JSC and in Moscow, with the Payloads Operations Integration Center at the Marshall Spaceflight Center and with the Space Station Program Office. Working together, we accomplished more than we ever imagined: from routine daily operations to four breath-taking spacewalks to a wildly successful science program, it was teamwork that made us successful.

The true reason for our success, and the success of any space mission, however, is the “can do” attitude we shared, on the ground and in space.

For example, the fine international team who put together a spacewalk using Russian spacesuits to fix the power supply to the American gyroscope overcame many hurdles – technical and political – to come up with a workable plan to get the job done. Originally, we were going to use the American spacesuits, but when they turned out to be troublesome, the team said “can do!” and came up with a way to make it work using the Russian Orlan spacesuits.

One of the most memorable moments onboard was that happy feeling of shared success when we came back inside after that incredible spacewalk.

But this “can do” attitude is nothing new to JSC. We at JSC have gone to the Moon and back. We have launched Space Shuttles. We are in the middle of building a beautiful space station.



A smiling Expedition 9 Flight Engineer and Science Officer Mike Fincke poses beside the photographic quality window in the Destiny U.S. Laboratory. This window is used for Earth observations. Image was taken during joint operations conducted with the Expedition 8 crew.

Our “can do” enthusiasm will help us be successful in The Vision for Space Exploration that will take us back to the Moon, on to Mars – and beyond!

We must be careful to temper our “can do” spirit with an equal attention to safety.

Gennady and I felt that at any time during our mission, we could have called a safety “time out” to make sure what we were doing – or were about to do – was prudent. I believe the ground teams felt that they too had a responsibility to keep things safe. And together we were able to achieve close to maximum performance, safely.

It was a true privilege to serve with the teams here at JSC. Gennady and I would like to thank everybody for their efforts toward our successful mission.

Please, please keep that “can do” spirit alive every day as we work together for an awesome future. Not only is the American public counting on us to be successful on their behalf but so is – I believe – every human being on this wonderful planet of ours.

JSC celebrates expedition 9 crew return

'Let's do this again sometime'

by Kendra Phipps

The word “bittersweet” seemed to be on everyone’s lips at the Expedition 9 Welcome Home event Nov. 19.

“It’s bittersweet to see you, because that means that Expedition 9 is over,” Expedition 9 lead flight director, Matt Abbott said. “Did we have a blast or what?”

“In one way it’s terrible (to be here), because it marks the end of our Expedition,” Expedition 9 Commander Gennady Padalka said in agreement. “Our flight was eventful and very, very productive.”

Padalka put it mildly – the International Space Station mission was jam-packed with spacewalks, research and unexpected challenges such as malfunctioning spacesuits and equipment. The crew, and the Earth-bound team members, handled it all with what ISS Science Office Mike Fincke called “a can-do attitude.”

“Everything that was a success about this mission was a result of a can-do attitude. Everyone here who said ‘yes we can’ – thank you,” Fincke said to the hundreds of employees and friends gathered in the Teague Auditorium. “That attitude is going to be so important when we go to the Moon and Mars.”

Nearly everyone who spoke at the event praised Fincke and Padalka for their seemingly boundless optimism and enthusiasm. Kent Rominger, Chief of the Astronaut Office, called them “unselfish, hardworking, appreciative and cooperative.”

“You couldn’t have matched up two guys better than these two,” Rominger said.

“Your enthusiasm and attitude not only made you a joy to work with but also motivated the rest of us,” Abbott said. “You brought us up with you.”

Kathy Laurini, deputy manager of the Payloads Office, said that the crew reminded her of astronauts from a bygone era.

“Thirty-five years ago, people talked about astronauts with the ‘Right Stuff.’ You guys have it,” she said. Laurini also said she



Expedition 9 Commander Gennady Padalka and International Space Station Science Officer Mike Fincke are pictured at their Welcome Home event, holding plaques commemorating their mission.

was impressed with, and grateful for, how much scientific research the crew accomplished. “We had 19 experiments, six or more of which had direct applications for the Vision for Space Exploration,” she said. “Mike also donated his off-duty time for ‘Saturday Morning Science,’ which meant everything to us.”

Fincke said that he was proud of the crew’s groundbreaking work with ultrasound, which he called “the hallmark of our Expedition.”

The hallmark on the home front was undoubtedly the birth of Fincke’s daughter, Tarali, during the mission. Fincke expressed his gratitude to everyone who helped out his growing family in his absence, and also thanked all of the astronaut trainers, scientists, engineers, communicators and others present in the audience for their support during the mission.

“Without you, we wouldn’t have known what to do onboard,” he said. “Thanks for the great mission, folks. Let’s do this again sometime.”