

In the wake of the storm

by Brad Thomas

WHEN HURRICANE KATRINA stormed ashore in late August, it changed the lives of hundreds of thousands of people on the upper Gulf Coast. In the wake of the storm, many people throughout the Houston area – including Johnson Space Center employees – stepped up to provide support to those who were ravaged by Katrina.

“It is an example of how the community can pull together,” said Steve Nagel, chief of aviation safety for NASA at Ellington Field. “It makes me feel good to be a part of an organization like this one.”

Nagel along with some of his Aircraft Operations Division (AOD) coworkers were involved in Katrina efforts at Ellington and at ground zero in Mississippi and Louisiana. Their efforts included collecting donations, working in shelters and providing support in the disaster zone.

Hangar 990 becomes transfer point for evacuees

NASA’s Hangar 990 at Ellington Field served as an evacuee staging point following Katrina. The operation was run by the Veterans Administration (VA), with NASA hosting. AOD Director Jimmie Mizell was one of the NASA team members who worked with relief efforts at Ellington. He served as the point of contact between NASA and the VA.

The evacuees received medical assistance when they got to Ellington, as well as some emotional support. One of the first things done for the evacuees, Mizell said, was to tell them, “You are here. You are safe. We care about you.”

Mizell said that approximately 26 planes landed at Ellington, bringing in more than 750 evacuees. Many of them had endured difficult conditions before being evacuated from New Orleans. Some of the evacuees were rescued from rooftops and highways where they were stranded for many hours.

Clothing and food donations were given by family, friends and local restaurants.

A family reunited

Katrina left its mark on personal lives. Families were separated with people desperately seeking loved ones. In some cases,



Workers unload cargo at Stennis Space Center in Mississippi. The equipment and supplies were used during Hurricane Katrina recovery activities.

family members wound up in different states. The workers at Ellington helped in these efforts.

“We reunited many families,” Mizell said. He recounted one case that was particularly memorable for him.

While his team was working with the VA to get the first flight of evacuees processed, Mizell was approached by a VA social worker and a gentleman who needed assistance. The man needed to charge his cell phone. Mizell took him to his office; unfortunately, the damaged phone could not be charged.

“At this point, he became very discouraged and started to cry,” Mizell said. “I asked him ‘Sir, is there anything I can do for you?’ His reply was ‘Not unless you can help me find my wife.’”

Mizell said that after a few deep breaths and a quick prayer, he asked the man what he could do about his wife.

“He told me she was critically ill, and they were not allowed on the same aircraft since she was critical and he was not,” Mizell said. “He was in Houston and he indicated to me her aircraft had departed for Florida. He thought he heard they were going to Pensacola. I did a search on the Internet for hospitals in Pensacola and, being familiar with the area there, started making some phone calls.”

Mizell made two phone calls. The first was unfruitful, but the second brought success. After introducing himself and explaining what he was doing, a hospital worker gave Mizell the room number.

“Without telling [the husband] of what I learned, I called the room and asked for her by name,” Mizell said. “It was her. Again, I introduced myself and told her I worked for NASA in Houston and that I had a gentleman that desperately wanted to talk with her. I gave him the phone and had to walk away as they talked.”

Mizell’s efforts did not stop there. “After they had a chance to talk,” he said, “we found the social worker who had brought him in and got him a ride to Hobby Airport, and he was on the next plane to Pensacola.”

AOD team supports aircraft operations at Stennis and Michoud

Meanwhile, members of the AOD team were dispatched to Stennis Space Center in Mississippi to organize air operations between there and NASA’s Michoud Assembly Facility in New Orleans. Research Pilot Scott Reagan and Flight Simulation Engineer Rocky Smith arrived at Stennis four days after Katrina made landfall.

One U.S. Army and two Kennedy Space Center helicopters were used to carry personnel and supplies between Stennis and Michoud. The flight crews and other personnel at Stennis and Michoud had to deal with limited communication capabilities due to the storm’s destructive blow.

“Our value was providing communication between the air crews and the outside world,” Reagan said. “Michoud was in trouble. We helped resupply it.”

Even though the New Orleans area took a hard hit, Reagan said the Michoud facility fared relatively well – despite being isolated for more than a week due to floodwater and debris blocking roadways. The levees around the external tank

processing facility had held. However, Michoud had its problems, including a power outage.

In addition to the flights between Michoud and Stennis, Reagan and Smith used the helicopters to survey power lines around Stennis and to survey damage in local neighborhoods. One



Research Pilot Scott Reagan stands in front of a destroyed Mississippi Gulf Coast casino. The casino boat came to rest in a parking lot after Hurricane Katrina’s storm surge lifted it from its location in the water.

flight included NASA Administrator Michael Griffin, who got a first-hand look at the damage to NASA facilities and the area.

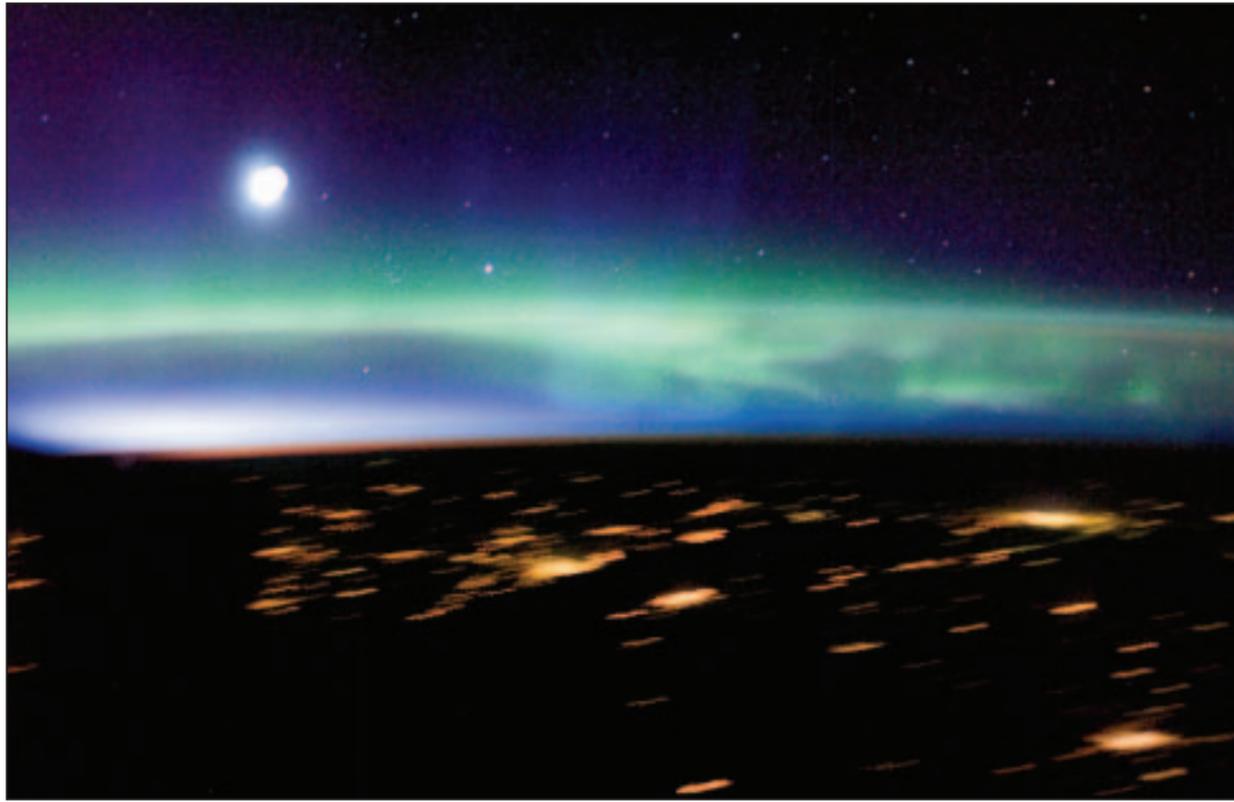
All in all, the helicopters carried more than 250 passengers and delivered more than 35,000 pounds of equipment and supplies to Michoud. They logged 80 flight hours in a week and a half.

Reagan and Smith left the area Sept. 11; their mission ended when the Marines reached Michoud on the ground. Reagan said progress was being made. “By the time we left, they basically had power back to most of the buildings at Stennis,” he said.

Reagan and Smith both said the NASA team members at Stennis and Michoud went the extra mile during the time of crisis. At one point, Stennis was taking care of 1,300 people who took shelter there, many of whom were not employees or employee family members. Most of the evacuees stayed in the first floor of the center’s headquarters building.

“There were a significant number of NASA employees who no longer had homes,” Smith said. “Even though they had their own problems, they worked well as a team.”

Smith said, “Stennis really did a superb job of taking care of those people. It wasn’t their job, but they did it.”



Aurora Borealis and lights in Finland, Russia, Estonia and Latvia are featured in this digital still picture taken by an Expedition 11 crewmember aboard the International Space Station. If it was daylight, parts of the Eastern Baltic Sea would be visible. The cluster of stars to the lower right of the thin crescent moon is the Praesepe or Beehive Cluster in Cancer. Just to the right of that is the planet Saturn.

Back to Earth

EXPEDITION 11 WRAPS UP A SUCCESSFUL MISSION

by Catherine E. Borsché

On Oct. 10, the anniversary of Columbus' historic voyage to North America, Expedition 11 landed in Kazakhstan, marking an end to its historic mission after more than 179 days in space.

Expedition 11 included Commander Sergei Krikalev and NASA International Space Station Science Officer and Flight Engineer John Phillips, both veterans of space travel. During this mission they had the opportunity to do many exciting things, some of which included welcoming the STS-114 crew to the International Space Station on its Return to Flight mission, conducting a spacewalk and working on experiments to further understanding of human biology and the space environment.

"With our new emphasis as announced by the president [last] year, we're going to be focusing our science on things that will take us farther and longer into space. For many of those experiments, the crewmembers are human guinea pigs," Phillips said.

Not only did the crewmembers learn more about how their bodies reacted to space, but they were also able to study processes like combustion in space with the SpacedRUMS experiment.

Another key objective of the mission was to continue developing the space station into a one-of-a-kind research

platform and scientific laboratory. Phillips noted that they would have the privilege of installing the Human Research Facilities (HRF) Rack 2. HRF 2 was delivered during the STS-114 visit to the station.

On July 28, Expedition 11 was able to do something that a space station crew had not had the ability to do since December 2002: welcome a shuttle crew to the station. *Discovery* arrived in dramatic fashion, doing a back-flip before docking to enable the station crew to photograph *Discovery's* heat shield. The shuttle crew was also able to thoroughly replenish station supplies with an extensive cargo transfer.

The station crew ventured out of their metallic living quarters on Aug. 18 to complete a spacewalk. They first removed a Russian Biorisk experiment housing bacteria from the outside of Pirs. Next, they detached a micrometeoroid and orbital debris collector (MPAC) and materials exposure array (SEED) panel from the aft section of the Zvezda Service Module.

The crewmembers also removed the Matroska experiment, a torso-like container with radiation dosimeters in human-tissue-equivalent material, and, later, with the MPAC and SEED panel, brought it back inside the station.

Krikalev and Phillips also installed a spare television camera on Zvezda and photographed and checked a Korma contamination-exposure experiment tablet on a handrail – all of which is not too shabby for a five-hour spacewalk.

Both Krikalev and Phillips had moments of distinction on the mission.

Phillips had the honor of being the first astronaut to testify before Congress while in space, orbiting the Earth at a mere five miles per second. Phillips took questions from the House Subcommittee on Space and Aeronautics on a wide range of topics, from safety on board to the view from orbit.

Krikalev also set a new time-in-space record, becoming the human with the most cumulative time in space as of Aug. 16. He surpassed the previous record of 748 days held by Sergei Avdeyev. But Krikalev said he isn't focused on breaking records.

"The job itself is very interesting for me, being there and being able to look back on Earth, to do something challenging," Krikalev said, indicating that is what was important. As for the record, "I probably never paid enough attention to it."

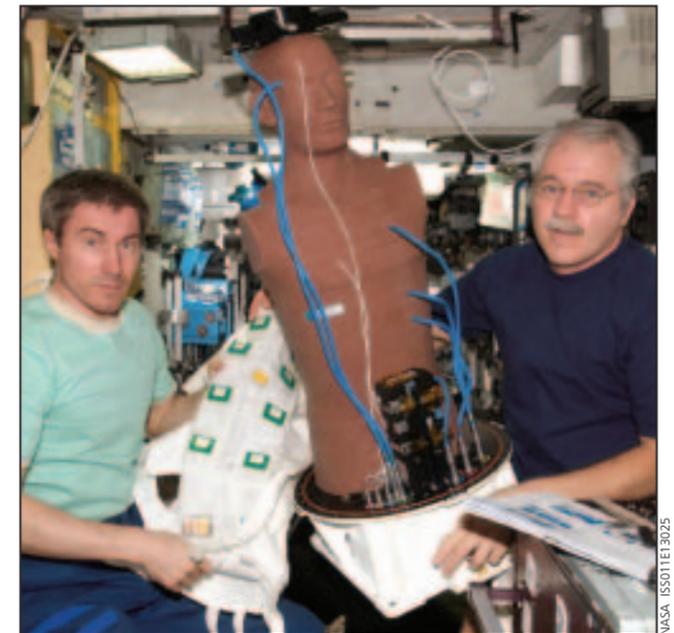
As of landing, Krikalev's cumulative time in space had reached 803 days, nine hours and 39 minutes.

Phillips said he believes deeply in what NASA is doing for the future.

"A civilization that only looks inward will stagnate," Phillips said. "We have to keep looking outward; we have to keep finding new avenues for human endeavor and human expression."



Astronaut John L. Phillips, Expedition 11 NASA space station science officer and flight engineer, participates in the 62nd spacewalk in support of station assembly.



Cosmonaut Sergei K. Krikalev (above left), Expedition 11 commander representing Russia's Federal Space Agency, and Phillips hold the European Space Agency Matroska radiation experiment in the Zvezda Service Module of the station during an August spacewalk for return to Earth. The experiment is designed to better understand the exposure of astronauts, including those making spacewalks, to radiation.