

PEOPLE on the **MOVE****Human Resources reports the following personnel changes:****Key Personnel Assignments**

Bill Gerstenmaier was named deputy manager, International Space Station Program.

Jim Spivey was named chief, Guidance and Propulsion Systems Branch, Systems Division, Mission Operations Directorate.

Additions to the Workforce

Stacey Medina joins the Human Resources Development Branch, Human Resources Office, as an employee development specialist.

Paul Wilson joins the Office of the Chief Information Officer, as a deputy information technology security manager.

Janna Althaus joins the Mechanical, Booster, and Maintenance Systems Branch, Systems Division, Mission Operations Directorate, as a flight controller.

Kimberly Shillcutt joins the Intelligent Systems Branch, Automation, Robotics, and Simulation Division, Engineering Directorate, as a computer engineer.

Kristina Wines joins the Life Support and Habitability Systems Branch, Crew and Thermal Systems Division, Engineering Directorate, as an aerospace engineer.

Daniel Mayes joins the Power Systems Branch, Energy Systems Division, Engineering Directorate, as an aerospace engineer.

Thomas Simon joins the Propulsion and Fluids Systems Branch, Energy Systems Division, Engineering Directorate, as an aerospace engineer.

Retirements

Mary Proudy of the Office of Procurement.

June Larsen of the Flight Crew Operations Directorate.

John Hoover of the Mission Operations Directorate.

Albert Behrend of the Engineering Directorate.

Warren Brasher of the Engineering Directorate.

John Griffin of the Engineering Directorate.

John Norris of the Engineering Directorate.

Raul Zepeda of the Engineering Directorate.

Gilbert Perez of the Space Shuttle Program.

Elmer Taylor of the Space Shuttle Program.

Arthur Schmitt of the Safety, Reliability, and Quality Assurance Office.

Lois Walker of the Safety, Reliability, and Quality Assurance Office.

Curtis Hanks of the International Space Station Program.

Gerald Egan of the White Sands Test Facility.

Bobby Kyle of the Space and Life Sciences Directorate.

Resignations

Clarence Williams of the Human Resources Office.

Laura Hembree of the Mission Operations Directorate.

John Brennan of the Center Operations Directorate.

Sandra Ostrosky of the Office of the Chief Financial Officer.

Aimee Woolverton of the Office of the Chief Financial Officer.

Paula Lee of the EVA Project Office.

DATES & DATA**February 9**

Chess Club meets: The Space City Chess Club meets each Friday evening, February 9, 16 and 23, from 5:30 p.m. until 9 p.m. at the Clear Lake United Methodist Church, 16335 El Camino Real, Rm. 423. All skill levels are welcome. For details, please call James Mulberry at x39287 or James Termini at x32639.

Houston Livestock Show and Rodeo runs through March 4. Go to <http://www.hlsr.com/> for more information.

Astronomers meet: The JSC Astronomical Society meets at 7:30 p.m. at the Twin Towers beside the Sonny Carter Training Facility. For details contact Chuck Shaw at x35416.

February 13

Aero Club meets: The Bay Area Aero Club meets at 7 p.m. at the Houston Gulf Airport clubhouse at 2750 FM 1266 in League City. For more information contact Larry Hendrickson at x32050 or check out www.bayareaaero.org.

IAAP meets: The Clear Lake/NASA chapter of the International Association of Administrative Professionals meets at 5:30 p.m. in the Colonial Room at Grace Community Church, 14325 Crescent Landing. Cost is \$12. For more information, contact Elaine Kemp at 281-483-0556.

February 14

Astronomy seminar: The JSC Astronomy Seminar Club will meet at noon February 14, 21 and 28, in Bldg. 31, Rm. 248A. For more information contact Al Jackson at x35037.

MAES meets: The Society of Mexican-American Engineers and Scientists meets at 11:30 a.m. in Bldg. 16, Rm. 111. For more information contact Laurie Carrillo at x35831.

Spaceteam Toastmasters meet: The Spaceteam Toastmasters meet Feb. 14, 21 and 28 at 11:30 a.m. at United Space Alliance, 600 Gemini. For more information, contact Patricia Blackwell at 281-280-6863.

February 15

Communicators meet: The Clear Lake Communicators, a Toastmasters International club, meets Feb. 15 and 22 at 11:30 a.m. at Wyle Laboratories, 1100 Hercules, Suite 305. For more information contact Allen Prescott at (281) 282-3281 or Richard Lehman at (281) 280-6557.

Directors meet: The Space Family Education board of directors meets at 11:30 a.m. in Bldg. 45, Rm. 712D. For more information, contact Lynn Buquo at x34716.

February 21

Scuba club meets: The Lunarfins meets at 7:30 p.m. For more information contact Mike Manering at x32618.

JSC to observe Black History Month

JSC will observe Black History Month with a series of activities to be held at 11:30 a.m. Feb. 14 in the Bldg. 3 cafeteria.

One highlight of the Black History Month Observance will be the performance of the recording group "For the Lord." Formed in 1994, the group brings a soulful contemporary flavor to the gospel music industry.

The group recently signed with Worldwide Gospel Records. The group's first release should be available in record stores soon.

For more information on activities planned for Black History Month Observance, contact Pat Burke at x30606.

Correction:

The date above the last item in the "Ripped from the Roundup" column in the Jan. 26 edition should have read 1981.

NASA BRIEFS**RAINFALL CHANGE MAY GIVE EARLIER SIGNAL OF EL NIÑO**

A decrease in rainfall over the Indian Ocean may give the world the earliest signal that a strong El Niño is about to start, according to researchers studying a 21-year global record of precipitation. Scott Curtis of the University of Maryland, Baltimore County, and Robert Adler of NASA's Goddard Space Flight Center now have a better understanding of precipitation patterns and can, in some cases, identify when a strong El Niño is coming before ocean temperatures warm.

El Niño events occur when the trade winds that normally blow from east to west over the Pacific Ocean diminish and the waters of the eastern Pacific become warmer than normal. These events in the tropical waters of the Pacific have impacts on global weather patterns, including increased rainfall in the eastern Pacific, and drought conditions in Indonesia and Australia.

Curtis and Adler examined changes in precipitation patterns, amounts and intensities of precipitation of El Niño/Southern Oscillation (ENSO) events over the past 21 years. With this information they created the first ENSO indices based on precipitation over the open Pacific Ocean to identify and define interannual climate variations.

Curtis presented the findings in his paper entitled "The Evolution of Tropical and Extratropical Precipitation During ENSO Events" at the 81st annual meeting of the American Meteorological Society at the Albuquerque Convention Center on Jan. 18. The findings from Curtis and Adler may provide a way to recognize the earliest signs of a strong El Niño and help nations around the world make better preparations.

HUBBLE AND CHANDRA PROVIDE EVIDENCE OF EVENT HORIZON

NASA's two Great Observatories, the Hubble Space Telescope and the Chandra X-ray Observatory, have independently provided what could be the best direct evidence yet for the existence of an event horizon, the defining feature of a black hole and one of the most bizarre astrophysical concepts in nature.

An event horizon is the theorized "one-way ticket" boundary around a black hole from which nothing, not even light, can escape. No object except for a black hole can have an event horizon, so evidence for its existence offers resounding proof of black holes in space.

By using data from Chandra and previous X-ray satellites, a team of researchers studied a dozen "X-ray novae," systems that contain a Sun-like star that orbits either a black hole or neutron star. By comparing the energy output from X-ray novae in their inactive, or dormant, phase, the Chandra team determined the black hole candidates emitted only one percent as much energy as neutron stars.

Scientists using the Hubble Space Telescope took an entirely different approach. Joseph F. Dolan, of NASA's Goddard Space Flight Center, observed pulses of ultraviolet light from clumps of hot gas fade and then disappear as they swirled around a massive, compact object called Cygnus XR-1.

Hubble, measuring fluctuations in ultraviolet light from gas trapped in orbit and around the black hole found two examples of a so-called "dying pulse train," the rapidly decaying, precisely sequential lashes of light from a hot blob of gas spiraling into the black hole. Without an event horizon, the blob of gas would have brightened as it crashed onto the surface of the accreting body. The results are consistent with what astronomers would expect to see if matter were really falling into a black hole, Dolan said.

Applications sought for Spirit of Apollo Scholarship

The AIAA Houston Section is again sponsoring the Spirit of Apollo Scholarship Program, which provides a \$1,000 scholarship during the 2001-2002 academic year. Applicants must have defined a scholastic plan that provides entry into some field of engineering or science pertinent to AIAA technical activities and must meet other specified eligibility requirements.

The Spirit of Apollo Scholarship was established in 1988 and is funded from interest on monies the Section maintains in a local savings account. This year's applications must be postmarked no later than May 1. The scholarship committee is responsible for evaluating the applications and

selecting the recipient for the following academic year. The successful applicant(s) will be notified in June. The first half of the scholarship amount is mailed to the school's financial office at the start of the fall term; the second half is provided at the start of the spring term.

A copy of the application form and selection information can be found on the AIAA Houston Section Home Page at <http://www.jsc.nasa.gov/aiaa>

For additional information on the scholarship program, e-mail edward.j.jablonski@boeing.com or dlechner@ems.jsc.nasa.gov.

SPACE CENTER Roundup

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