



# MARSHALL STAR

Serving the Marshall Space Flight Center Community

July 22, 2010

'Beads of Courage' presented to Marshall team member

## Shuttle Atlantis astronauts visit Marshall on July 15

By Sanda Martel

Astronauts who flew space shuttle Atlantis on its final planned flight visited the Marshall Space Flight Center on July 15 to share highlights with Marshall team members who contributed to the success of their May mission.

Also flying on the mission was some special cargo – beads designed for Beads of Courage, an organization in Tucson, Ariz., that provides innovative supportive care programs for seriously ill children and their families and the health care providers who care for them.

*See STS-132 on page 5*



Commander STS-132 Ken Ham, left, presents beads flown on the STS-132 mission to Jamie Newton and his daughter, Sydney.

## Marshall hosts NASA Mentor-Protégé Agreement signing

By Rick Smith

The Marshall Space Flight Center recently hosted a NASA Mentor-Protégé Agreement signing between a NASA prime contractor and a Historically Under-utilized Business (HUB) Zone-certified small business.

The three-year agreement is between Pratt & Whitney Rocketdyne of Canoga Park, Calif., and Avans Machine & Tool of Scottsboro, Ala. Leaders from the companies joined Marshall Center team members July 7 to sign the agreement.

Pratt & Whitney Rocketdyne is the prime contractor for NASA's space shuttle main engines. Since 2007, the company also has been the prime

contractor for development and testing of the J-2X rocket engine, designed to power the upper stages of NASA's next-generation launch vehicles.

Established in 1989, Avans has provided machining and fabrication support to a number of Marshall Center prime contractors. The company manufactures hardware and equipment for aerospace, defense, industrial and medical industry customers.

"I want to commend both Pratt & Whitney Rocketdyne and Avans Machine for recognizing the importance of teaming and partnering," said Marshall Center Associate Director Robin Henderson, who welcomed participants

and guests to the signing event. "Pratt & Whitney's mentoring of this company will further strengthen Avans' competitiveness in today's marketplace, and hopefully will expand employment opportunities in North Alabama."

The NASA Mentor-Protégé Program, created in 2008 by NASA's Office of Small Business Programs, pairs large companies with eligible small businesses to establish long-term relationships, enhance technical capabilities and enable those small businesses to successfully compete for larger, more complex prime contract and subcontract awards.

Avans is the first HUBZone-certified

*See Signing on page 6*

# THE FACE OF MISSION SUCCESS IS: Ken Welzyn

*Chief engineer for space shuttle external tank  
in Chief Engineers Office*



- **Organization:** Engineering Directorate
- **Joined NASA:** 1990
- **Education:** Bachelor's degree in mechanical engineering, 1984; master's degree in mechanical engineering, 1986; both from the University of Alabama in Tuscaloosa
- **Responsibilities:** I'm the technical lead for the external tank, responsible for all aspects of the technical performance of the tanks, including design, manufacturing and flight performance. I coordinate the support of the Engineering Directorate, along with the External Tank Project in the Shuttle Propulsion Office and the Safety & Mission Assurance Directorate, to deal

with all changes and technical issues that may arise.

- **What are the highlights of your time as chief engineer?** We've done so much and dealt with so many things since Return to Flight in 2005, it's hard to pick just a few. The debris reduction design and processing improvements have been remarkable. I would have to say repairing and flying the hail-damaged ET-124 tank for STS-117, and helping to solve the Engine Cut-off System anomalies rank among the top, as would each shuttle launch I've worked – 18 and counting. And I have to include getting a few phone calls from good friends on the International Space Station.
- **What will be the legacy of the Space Shuttle Program?** The program is truly an incredible accomplishment. Until you get the chance to work first hand in launching humans into space, it's really hard to understand how difficult it is, and the focus and energy required from everyone involved. The vehicle is amazing and the propulsion hardware is just fantastic, but I think the real legacy will be the people who made it all possible, and what we do from here. The expertise that this program has developed is a vital national asset and I hope we can put it to good use.
- **What thoughts went through your mind when the last external tank was completed?** How privileged I've been to be a part of this effort. How great a team we have, and how we forged through tough times, and how we persevered and made a difference. How proud I am of the folks at Michoud Assembly Facility, and how honored I am to have worked with them.
- **How do you hope to contribute to Marshall's future goals?** I like helping to solve problems. If we're building new rockets, we'll have new challenges, and I'd like to be right in the middle of it.

## *Marshall interns to conclude summer experience with 'Poster Expo' event July 29*

The Marshall Space Flight Center team is invited to review the summer work of more than 150 Marshall interns during the annual Intern Poster Expo, to be held July 29 from 1-3 p.m. in Activities Building 4316.

Students from high schools and universities around the country, each participating in one of a dozen NASA summer internship programs, will showcase the science and engineering research work they've supported at Marshall over the summer. The center's Academic Affairs Office, which

organizes the event and manages the summer internships, will award prizes for the best presentations. Lockheed Martin of Huntsville, the corporate sponsor for the event, will provide the cash prizes.

All civil service and contractor employees are encouraged to attend.

To learn more about internship opportunities at Marshall, visit <http://education1.nasa.gov/edoffices/centeroffices/marshall/home>.

# Shuttle Propulsion Office honors outstanding members at annual awards ceremony

By Sanda Martel

The Marshall Space Flight Center's Shuttle Propulsion Office honored its outstanding team members at an annual awards ceremony July 14 in Activities Building 4316.

Steve Cash, manager of the Shuttle Propulsion Office, welcoming more than 250 team members to the event, said, "This is a celebration, because this team is finishing strong."

"When external tank production was impacted by Hurricane Katrina in 2005, no one thought there was any way we would meet hardware deliveries and complete the space shuttle manifest by September 2010," Cash said. "But this team made it happen and I'm thankful to be a part of it."

"All hardware for the remaining shuttle flights is at Kennedy Space Center, Fla., today," Cash added. "You have done your job and I'm extremely proud of you."

Jaime McMillon, an employee of United Space Alliance of Houston working at Marshall's Resident Office at Kennedy Space Center, was named Shuttle Employee of the Year for 2010. She was chosen by coworkers from among the Shuttle Employee of the Month honorees for the preceding 12-month period.

Those honored with the peer-nominated "Make It Happen- Outstanding Contribution" awards included NASA employees Barbara Shannon, Stephanie Lacy-Conerly, Diane Fleming, Robert

Moran, Walter Stephens, Richard Sheppard, Jay Dennis and Lori Johnson. Contractor award recipients included Sheila Woods of Deltha-Critique in Huntsville; Link Sherman and Jerry Laurine of DFS Inc. in Huntsville; Wendy Snooks and Luke Henke of United Space Alliance in Houston; Linda Posey of DPA Associates Inc. in Kansas City, Mo.; Marie Webb of Bastion Technologies Inc. in Houston; and Alan Norwood of BFA Systems Inc. in Huntsville.

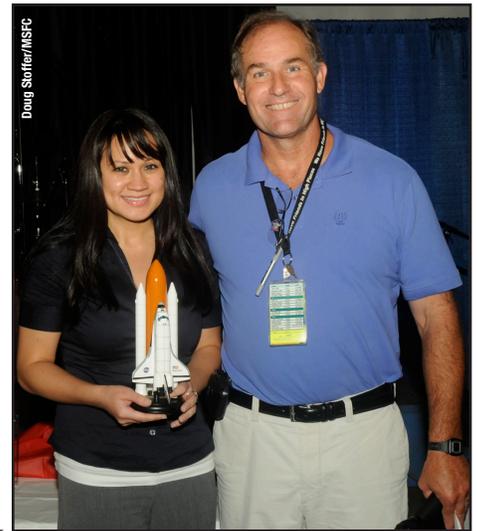
Receiving awards for 10 years of service were NASA's David Beaman, Philip Benefield, Chad Bryant, Thomas Milner, Christopher Rosson, Shawn Selvidge and Steven Wofford. Twenty-year service awards were presented to Johnny Heflin, David Meyer and Michael Mitchell. Receiving awards for 25 years of service were Beth Allison, Jerry Cook, David K. Hall, Kevin Petersen, Jody Singer and Chet Young. Thirty-year service awards were presented to John Chapman, Jeffery McCaleb and Marie Semmel.

Shuttle office program analyst Angela Lovelady performed "Greatest Love of All" and "How Do I Say Goodbye to Yesterday," accompanying a video that included images from all 134 shuttle launches since the first, STS-1, in April 1981.

Additional entertainment was provided by the Dixie Diesels, a band that includes NASA employees Pete Allen, Jeppy Clayton, Edwin Ricks and Marshall Information Technology Services contractor Sharon Hancock.

The ET Starlight Wranglers, a three-piece band consisting of Bastion Technologies contractors Ronnie Knight, Todd Lemons and Steve Burchell, also performed, singing familiar tunes but changing the lyrics to describe their work as engineers supporting the External Tank Project Office.

*Martel, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis and Communications.*



Jaime McMillon, left, was presented the Shuttle Employee of the Year award by manager Steve Cash.



The ET Starlight Wranglers perform at the Shuttle Propulsion Office awards ceremony.

# Marshall teams take home top titles at Cotton Row Run



Several Marshall Space Flight Center teams recently competed in the 2010 Mercedes-Benz Cotton Row Run through downtown Huntsville. The women's team placed first at the event, while the men's teams came in first, second, 12th and 13th. The teams were sponsored by the MARS Running Club and included participants, from left, back row, Jimmy Cobb, Kent Criswell, Billy Burleigh, Tom Smith and Will Crisp. Middle row, John McCullough, Mike Selby, Frank Thomas, Joey Butler, Josh Whitehead, Kevin Plank and Charlie Holt. Front row, Sara Masterson, Dauna Coulter, Stacy Bellestri, Christy Gattis and Malene McElroy. Not pictured are Paul Thompson, Emeterio Hernandez, Casey Hardy and Matthew Carter.

## Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Marshall Star Ad Form." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue, July 29, is 4:30 p.m. Thursday, July 22.

### Miscellaneous

Henri De Rivel English saddle, Pony Pro 15 3/4", \$495; saddle rack, \$30. 256-880-7305

"G" gauge LGB railroad engines, track and switches in original boxes. 256-247-0375

14KWG vintage diamond engagement ring, 1.25TCW, \$2,400. 931-212-5191

Toddler headboard, bookshelf attached, \$35. 256-698-7328

HP single ink cartridges, one HP95 color, two HP94 black, all three, \$30. 256-797-7829

White Estate by Whirlpool washer and dryer, \$225 for set. 256-230-0333 or 256-658-0638

360 Games, Grand Theft Auto IV, Prototype, Armored Core, Assassin's Creed II, \$30 each. 256-777-7746

Gym equipment, Schwinn rowing machine, Weslo treadmill, Ab Lounger, equipment mat, \$800. 256-739-5282

Eagle Transducer Model HS-WST, \$20; PaintBall auto loader, \$10; Paintball full mask, \$10. 256-527-0110

Havanese female, 18 months old, AKC champion bloodlines, silver/cream/black, \$650. 931-455-7303

Black contemporary bedroom suite, nightstand, dresser/mirror, queen bed, chest, \$800. 256-479-4345

Playstation 3 game, Little BIG Planet, Game of the Year edition, rated E, \$30. 256-828-1234

Tickets for Bristol Sprint Cup Night Race, eight together, face value, \$109. 256-679-2165

Two-bag 6.5 bushel rear bagger, 100 series, \$200. 256-651-3045

### Vehicles

2007 Honda cbr1000rr, title in hand, 3,700 miles, \$6,700 obo. 205-807-7841

2007 GMC Envoy GLE, 2WD, gray exterior, 31k miles, \$17,500. 256-431-4477

2007 Kawasaki Ninja, many extras, 3k miles, \$5,500 obo. 256-714-3431

2006 Suzuki GS500F, low miles, 55MPG, \$2,895. 256-651-0702

2006 Toyota Tundra double cab, black, tan interior, bed cover, 52k miles, \$17,000. 256-509-9431

2003 Harley Davidson Sportster 1200 Custom 100th Anniversary Edition Bike, 2k miles, \$6,000 obo. 334-447-9184

2002 SeaRay, 21' Bow Rider, Bimini top, cover, trailer, accessories, \$15,500. 256-468-0785

2000 Mercury Villager Estate passenger van, 148k miles, \$4,000. 256-654-1990

1998 GMC LWB white truck, 177k miles, \$4,400. 256-468-9377

1997 Pontiac Bonneville, automatic, green, four door, power, V6, new tires, 164k miles, \$2,000 obo. 256-550-0724

1995 Nissan XE V6 P/U, five speed, camper shell, 80k miles, \$5,400. 256-457-5823

1995 Ford Explorer Eddie Bauer, rebuilt transmission, 183k miles, \$2,950. 256-880-6563

454 International Diesel tractor, \$4,500. 256-379-4010

Honda XR250R, \$800; GT BMX racing bike, \$125. 256-508-3257

### Wanted

Students interested in beginning to advanced scuba diving training. 256-651-9909

Houses/offices to clean, available evenings and weekends. 256-777-8595 leave message

Seadoo or Yamaha Waverunner, 2000 and newer. 256-651-5847

Clean small used car for college student, four doors, automatic, air, around \$3,500. 256-881-8607

Dehumidifier for basement. 256-655-0393

Riding lawn mower in good condition. 256-694-8114

Commander Ken Ham was joined by Pilot Tony Antonelli and Mission Specialists Garrett Reisman and Piers Sellers in a spirited presentation in Morris Auditorium, Building 4200.

The camaraderie among the astronauts was apparent, as their presentation was filled with exchanges of good-natured banter. But the crew members were unanimous in expressing the awe they feel for having the privilege of space travel and of supporting the “incredible international asset” that is the International Space Station, Antonelli said.

“The space station is an engineering miracle and a smashing success politically,” Sellers said when the astronauts met with Huntsville-area media prior to the event in Morris Auditorium. It is the most complex scientific and technological endeavor ever undertaken, involving support from five space agencies representing 16 nations. The research outpost includes contributions from the United States, Canada, Japan, Russia, Brazil, Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom.

Shuttle Atlantis launched from Kennedy Space Center, Fla., May 14 and returned May 26. The STS-132 mission cargo included a Russian Mini Research Module, a set of batteries for the space station's truss, a high-powered dish antenna assembly and other replacement parts for the orbiting outpost. The astronauts performed three spacewalks.

The astronauts presented 17 beads flown on the mission to Jamie Newton, an employee of CIBER Inc., a support contractor at Marshall. Newton will, in turn, give them to the Beads of Courage organization, which will present them to children undergoing cancer treatment.

Newton works with Beads of Courage because his 6-year-old daughter Sydney has been battling cancer for more than a year. During that time, she has received more than 450 beads – each representing a step in her treatment.

Beads of Courage and Newton developed the idea of sponsoring a contest for new bead designs, having them flown in space and presented to children undergoing treatment.

“Nothing could be more encouraging to a child fighting cancer than to see a symbol of courage – a bead – actually flown to space by the very people who ride into orbit on the space shuttle,” said Newton. “That act represents one of the most courageous things other human beings do for all of us.”

The space Beads of Courage contest was promoted on the organization's website from mid-March to mid-April and concluded with the selection of 17 designs by talented bead artists who had already donated their time to other bead designs, Newton said. Fifty-four entries were submitted.

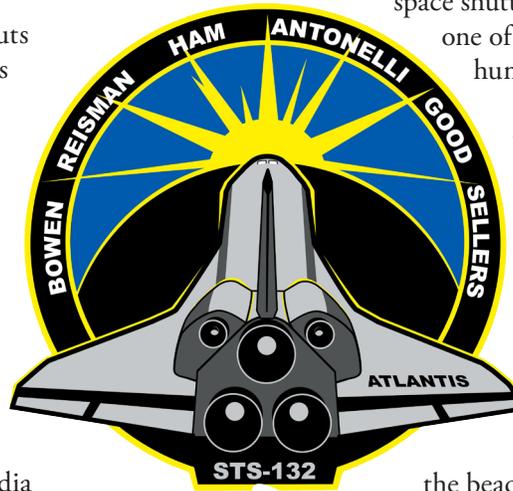
Newton and Beads of Courage submitted a request to NASA to fly the beads. The Space Shuttle Program Office at Johnson Space Center in Houston approved the request to fly the beads as part of NASA's Official Flight Kit for the STS-132 mission.

For more information about the STS-132 mission, visit <http://www.nasa.gov>.

To see the beads that flew on the STS-132 mission, visit <http://www.flickr.com/photos/28634332@N05/sets/72157623910222511/show/>.

For more information about the Beads of Courage, visit <http://www.beadsofcourage.org/>.

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STS-132 astronauts, from left, are Ken Ham, Pier Sellers, Tony Antonelli and Garrett Reisman.

## High flyin' good time!

The children of Marshall Space Flight Center team members spent a day at the center last month during its annual "Take Our Children to Work Day." The kids got to participate in fun and educational projects, including designing and building a lunar lander to "safely land astronauts" on the moon's surface, making their own motorized robots and conducting science experiments with household items. At right, children throw paper planes through a hula-hoop during a contest in Activities Building 4316. Collin Gaddes, son of aerospace engineer Brent Gaddes of the Shuttle Propulsion Office, won first place when his plane flew for the longest duration. The event was organized by Marshall's Office of Diversity & Equal Opportunity.



## Signing *Continued from page 1*

small business to sign a Mentor-Protégé agreement. The HUBZone Program was established by the federal government in 1997 to empower communities grappling with economic difficulties and high unemployment, generating new contracting opportunities and creating local jobs.

Since its inception, more than \$25 billion in contract and subcontract awards have been placed with HUBZone-certified small businesses, said David Brock, small business specialist in the Marshall Center's Small Business Office. Today, those HUBZone small businesses employ more than 250,000 workers, and some 150,000 people live and work in HUBZone areas, Brock noted.

Those statistics were not lost on Alabama leaders, including State Rep. Butch Taylor of Alabama's 22nd District and Jackson County Commissioners Jack Allen and Gaylen Stone, who visited Huntsville to witness the signing event



Signing the Mentor-Protégé agreement at the Marshall Center are, from left, Marshall contracting officer Kim Adams; Paul Fowler, director of supply management for Pratt & Whitney Rocketdyne; and Jeffrey Avans, president of Avans Machine & Tool.

and talk with participants.

For more information about NASA Mentor-Protégé signing agreements, visit <http://osbp.nasa.gov/mentor.html>.

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Vol. 50/No. 43

Marshall Space Flight Center, Alabama 35812  
256-544-0030  
<http://www.nasa.gov/centers/marshall>

The Marshall Star is published every Thursday by the Public and Employee Communications Office at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Classified ads must be submitted no later than 4:30 p.m. Thursday to the Marshall Public and Employee Communications Office (CS20), Bldg. 4200, Room 102. Submissions should be written legibly and include the originator's name. Send e-mail submissions to: [intercom@msfc.nasa.gov](mailto:intercom@msfc.nasa.gov)  
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Manager of Public and Employee Communications: Dom Amatore  
Editor: Jessica Wallace Eagan

U.S. Government Printing Office 2010-623-044-00058

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