



MARSHALL STAR

Serving the Marshall Space Flight Center Community

Dec. 16, 2010

Strong finish for 2010 Combined Federal Campaign

Marshall team donates more than \$726,000 during government fundraiser

By Rick Smith

By the close of this year's Combined Federal Campaign Dec. 10, the Marshall Space Flight Center work force had raised \$726,656 – appropriately marking the conclusion of its 50th year in operation by surpassing its CFC goal for 2010 by more than \$50,000.

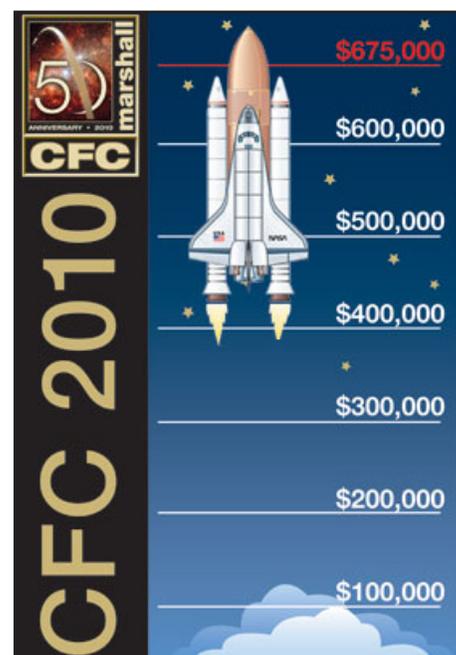
"It was Marshall Center Director Robert Lightfoot's idea to raise this year's goal by \$50,000 – from \$625,000 to \$675,000 – to commemorate our 50th anniversary," said Marshall

facilities project manager Ken Dunn, CFC executive chairperson for this year's campaign. "We are thrilled that the team responded as it always does – going farther than expected and doing more than is asked – to take us another \$50,000 beyond that mark."

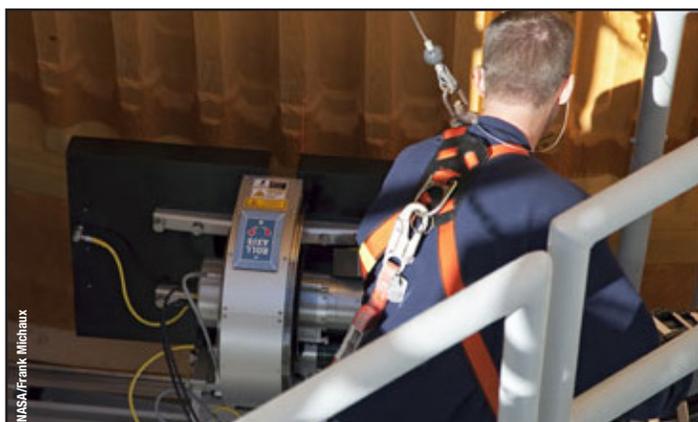
Nearly 60 percent of the Marshall work force contributed to the goodwill drive, which benefits charitable organizations at the local, state and national level.

"What an amazing, wonderful outpouring of generosity from the Marshall team," Lightfoot said. "We raised the bar for this year's campaign, and, in typical Marshall fashion, our employees met that challenge."

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Tanking test to be performed to verify Discovery repairs



An engineer uses a backscatter device to examine space shuttle Discovery's external fuel tank on Launch Pad 39A at the Kennedy Space Center. The device bounces radiation off the tank, allowing technicians to see under the tank's foam insulation.

By Sanda Martel

At Marshall Star press time, the Space Shuttle Program was planning a tanking test no earlier than Dec. 17 to help verify repairs made to space shuttle Discovery's external tank.

Last month technicians repaired cracks on the tops of two 21-foot-long, U-shaped aluminum brackets, called stringers, on the tank. Foam insulation also was reapplied on the stringers.

Tanking test plans call for recording thermal and stress measurements in the intertank region near the top of the external tank where the stringers are located.

Following the test, a team of engineers and technicians will inspect the tank for evidence of any foam cracking that could occur on an actual launch day. The test also will verify

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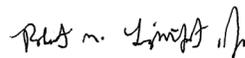
Director's Corner

Season's Greetings!

Season's Greetings to everyone on the Marshall Team! I want to wish all of you a safe and happy holiday season.

Our diverse Marshall Team has many ways to observe the season. We come from many places with different religious and family traditions. Some of us stay home, and others travel. Some celebrate loudly and some quietly. Some focus inward, while others look to serve their communities. We renew our spirits in solitude and in gatherings, in crowded cities or surrounded by nature's beauty. It's a season of joy, of thanks, of hope. I sincerely hope that it's a time for all of us when we can lighten our daily loads and remember the big things that are important to us – our families and our freedoms.

Please take time to remember those in need and the members of our armed forces serving around the world and the families back home who miss them. Enjoy the season, get some rest, and I'll see you all after the New Year!



Robert Lightfoot
Marshall Center Director



CFC *Continued from page 1*

Team members gave in other ways as well. Since the start of the campaign in late September, nearly 250 Marshall workers took part in 14 bus tours to participating charitable organizations around Huntsville and Madison County. During the same period, more than 360 team members supported 35 Community Service Days activities, donating a combined 1,350 hours to swing hammers, wrap packages, deliver canned goods, serve Thanksgiving dinner and contribute in numerous other ways to those in need.

What drives the Marshall team to step up, year after year? It's more than simple charitable giving, said Marshall community relations specialist Sherri Stroud. It's the impact of participation, of seeing firsthand the differences one can make in the lives of others.

"My first year as a government employee, I made a \$1 contribution to CFC," she recalled. "I didn't know

a lot about community service and nonprofits at the time, but it seemed like an easy way to give. Twenty-six years later, my contributions have increased significantly, because I'd had the chance to see how our dollars are spent to improve the quality of life for so many individuals."

Judith Orr, a contract administrator in Marshall's Office of Procurement, agreed. "One of the greatest joys in life should be to help others, expecting nothing in return," she said. "CFC affords us that opportunity. The lives of countless people are blessed – even changed – through the generosity of those who support the Combined Federal Campaign."

And the people who manage charitable and not-for-profit organizations have come to count on the Marshall team each year as well. Among them is Sherry Jones, volunteer coordinator for Burritt on

the Mountain, the historic Monte Sano park and museum where Marshall team members prepared decorations and cleaned up the grounds to help ready the nonprofit facility for its holiday season.

"I don't know that I've ever seen a group of volunteers as organized, creative and industrious as the volunteers from NASA," Jones said.

The Marshall Center's CFC effort is part of the Tennessee Valley Combined Federal Campaign – a joint effort that also includes the Army's Aviation and Missile Command and other federal agencies at Redstone Arsenal and in surrounding Alabama and Tennessee counties. The final total for the Tennessee Valley CFC, which set a goal of \$2.1 million, is expected by the end of the year.

Smith, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis & Communications.

Celebrating a 'Cosmic Holiday'



Clad in his finest NASA flight gear, "Santa," left, reports for duty Dec. 7 at the Marshall Space Flight Center, where he and Center Director Robert Lightfoot, center, welcome retired NASA engineer Alberto Duarte and others to the annual holiday reception.

More than a thousand team members at the "Cosmic Holiday" event listened to live music, shared refreshments and drinks provided by the Marshall Exchange and toured NASA exhibits in the out-of-this-world holiday setting in Activities Building 4316. The event concluded Marshall's year-long anniversary celebration, marking 50 years since the center was formally dedicated in 1960.



Mark Drake, an AI Signal Research Inc. contractor supporting Marshall's exhibits outreach activities, hosts an interactive 3D presentation in the NASA Exploration Experience. The traveling exhibit, which propels visitors on a journey across the solar system, was a highlight of the holiday reception. It's managed by Marshall on behalf of the Exploration Systems Mission Directorate in Washington.



Walter Haeussermann, member of von Braun's rocket team, dies

Dr. Walter Haeussermann, 96, a member of Dr. Wernher von Braun's German rocket team, died last week in Huntsville.

Dr. Haeussermann worked with Dr. von Braun in Germany during World War II, and in 1948, he joined Dr. von Braun at Fort Bliss, Texas, working for the U.S. Army. He became a charter member of the Marshall Space Flight Center when it was created in 1960.

Dr. Haeussermann worked as the director of the Astrionics Division, responsible for guidance and control systems for the Saturn rockets, including the Saturn V. He was in the blockhouse during all the Saturn lunar launches, including the Apollo 11 mission which landed on the moon in 1969. He later served as director of the Directorate for Science and Engineering at Marshall.

He is survived by his wife, Ruth Knos Haeussermann.



Dr. Wernher von Braun, center, meeting with his management team in the early 1960s. From left are Werner Kuers, director of the Manufacturing Engineering Division; Dr. Walter Haeussermann, director of the Astrionics Division; Dr. William Mrazek, Propulsion and Vehicle Engineering Division; Dieter Grau, director of the Quality Assurance Division; Dr. Oswald Lange, director of the Saturn Systems Office; and Erich Neubert, associate deputy director for Research and Development.

Christmas spirit: Making a difference with 'Bikes or Bust'

International Brotherhood of Electrical Workers team members of Electrical Local No. 558, who are on the Support Services Contract in the Office of Center Operations at the Marshall Space Flight Center, have gone the extra mile again this year to support needy children in the Huntsville area.

They donated 19 bicycles for the "Bikes or Bust" Program, sponsored by radio station WZYP in conjunction with the U.S. Marine Corps. The program distributes bicycles to children at Christmas.

In previous years, the electricians collected money to buy their supervisors and foremen gifts, and a catered dinner for their team. But starting in 2009, the traditional collection was instead pooled to purchase 18 bicycles for donation to the program.



Electrical Local No. 558 IBEW team members donated 19 bikes this year for the "Bikes or Bust" Program.

A spokesman for the group said, "We want to continue helping less fortunate children in the community. We're really proud to be able to do a small part."

Engineering Directorate receives Capability Maturity Model Integration level 3, 2 rating

Submitted by the Engineering Directorate

The flight software branches within Engineering Directorate's Flight & Ground Software Division received renewal of the Software Engineering Institute Capability Maturity Model Integration, or CMMI, level 3 rating in August.

The rating resulted from appraisal team review of the practices performed for the Upper Stage Flight Software project with respect to each of the 18 maturity level 3 process areas, which include requirements development, technical solution, product integration, verification, validation, organizational process focus, organizational process definition, organizational training, integrated project management, risk management, decision analysis and resolution, plus the seven maturity level 2 process areas addressed below.

A CMMI level 3 rating is required for in-house software development per NPR 7150.2A NASA Software Engineering Requirements. In August 2007, the flight software branches within the Engineering Directorate were the first organizations among NASA centers to achieve a CMMI

maturity level 3 rating.

In May, the Avionics & Software Ground Systems Test Branch achieved a CMMI maturity level 2 rating. An appraisal team reviewed the practices performed for the Ares System Integration Lab project with respect to each of the seven maturity level 2 process areas, which include requirements management, project planning, project monitoring and control, supplier agreement management, measurement and analysis, process and product quality assurance, and configuration management. The targeted rating resulted from team evaluation of the processes and resulting products relative to the goals of each process area.

CMMI is a best practices model that provides organizations guidance and a systems approach to improve software processes and end products. This achievement is part of a NASA-wide initiative to improve quality, safety and overall customer satisfaction. Achieving a CMMI maturity level rating requires significant team effort on the part of the participating organizations and involves active participation of the Safety & Mission Assurance Directorate's Software Assurance team in meeting the goals of process and product quality assurance.

The paths leading to these milestones have resulted in considerable improvements to the organization's products and processes and provide a basis for continually advancing future system and software engineering capabilities into the next generation of launch vehicles, real-time simulations and payload projects.



Courtesy photo
Flight & Ground Software Division Chief Leann Thomas, holding the certificate, receives a CMMI maturity level 3 renewal rating in August from appraisal team members Ted Drude, David Statum, Helen Houch, lead appraiser Mike Bradley and Kim Jones.



Courtesy photo
Flight & Ground Software Division Chief Leann Thomas, displaying the certificate, receives a CMMI maturity level 2 rating in May from appraisal team members David Statum, Sorita Wherry, Helen Housch, lead appraiser Mike Bradley and Cathy White.

Obituaries

Fred Dolan, 78, of Huntsville died Nov. 18. He retired from the Marshall Center in 1994 as a materials engineer supervisor. He is survived by his wife, Martha Russell Dolan.

Bolivar Thomas Recio, 76, of Huntsville died Nov. 20. He retired from the Marshall Center in 1992 as a mission operations integration engineer supervisor.

George Foster Jr., 84, of Huntsville died Nov. 23. He

retired from the Marshall Center in 1981 as a general supply specialist. He is survived by his wife, Eula Foster.

Brian D. Caden, 60, of Huntsville died Dec. 4. He was the property disposal officer in the Property Management Office of the Office of Center Operations.

Hugh W. Zeanah, 92, of Huntsville died Dec. 8. He retired from the Marshall Center in 1989 as an electronics engineer supervisor.

Kitchen Sinks, Shenanigans, Scared Hitless hit first place in Division A, B, C MARS softball tournament

By Jessica Wallace Eagan

It was victory for three MARS Softball Club teams as the 2010 season came to a close. The tournament champions are Division A Kitchen Sinks, Division B Shenanigans and Division C Scared Hitless.

The season ran from April 19 to Sept. 9, finishing on the Marshall Space Flight Center's new softball field on Pioneer Street. Construction of the field was funded by the Office of Center Operations and was finished this past summer. Previously, the teams played on the Army's field on the corner of Patton and Gray roads on Redstone Arsenal.

The club has 17 teams with more than 300 players, and has played 127 games this year. The teams are divided into divisions. Division A is for intermediate, skilled and

competitive players; Division B is for co-ed intermediate and skilled players; and Division C is for co-ed beginner and intermediate players. Co-ed teams require a minimum of two females.

The club is open to anyone with access to Redstone Arsenal, including off-site contractors and family members.

Team members interested in playing softball, please contact Jim Lomas, MARS Softball Club president, at 544-8305 or at jim.lomas@nasa.gov; or Victor Pritchett, vice president, at 544-5771 or at victor.e.pritchett@nasa.gov.

Eagan, an AI Signal Research Inc. employee and the Marshall Star editor, supports the Office of Strategic Analysis & Communications.



Kitchen Sink team members are, front row from left, Jim Lomas of the Engineering Directorate; Andrew Faro and Ryan Smith, both dependents; Chris Fulton of Dynamic Concepts Inc., supporting the Engineering Directorate; John Weir and Beau Simpson, both of the Engineering Directorate; and Bill Hartsell of Teledyne Brown Engineering, supporting the Engineering Directorate. Back row from left are Kurt Jackson, Charles Foster and Mark West, all of the Engineering Directorate; Nathan Alday, of Dynamic Concepts Inc., supporting the Engineering Directorate; Dan Thomas of the Engineering Directorate; and Neil White of Jacobs Technology Inc., supporting the Engineering Directorate. Not pictured: Jon Patterson of the Engineering Directorate and Walker Gabriel of Teledyne Brown Engineering, supporting the Engineering Directorate.



Shenanigans team members are, front row from left, Matt Wood of the Army; Jake Kilborn, of Jacobs Technology Inc., supporting the Engineering Directorate; Courteney Ryals of the Engineering Directorate; Tristan Curry of Teledyne Brown Engineering, supporting the Engineering Directorate; and Kristin Spencer of the Army. Back row from left are Matt Ryals, spouse of Courteney Ryals; Derek O'Rear of the Army; Troy Mitchell of SAIC Inc., supporting the Engineering Directorate; Kiel Adams of the Army; Sam Digesu of the Engineering Directorate; Walker Gabriel of Teledyne Brown Engineering, supporting the Engineering Directorate; Carter Johnson of the Army; and Russell Lane of the Engineering Directorate. Not pictured: Todd Thompson and John Smith, both of the Engineering Directorate.



Scared Hitless team members are, front row, Andrew Smith of the Engineering Directorate. Middle row from left are Christi Smith, Laura Lacock and Nina Ricks, all of the Army. Back row from left are Mike Johnson of the Army; Brad Henley, dependent; Josh Miller of the Army; Rachel Miller, dependent; John Tillery of the Army; Adam Lacock of the Engineering Directorate; and Chris Butler and Ryan Macnicol, both Army dependents.

Star to resume Jan. 6 with colorful front page!

Marshall Star, Daily Planet to take break for holiday season

This is the last issue of the Marshall Star for 2010. The Star, printed 50 times each year, will not publish for two weeks during the holiday season.

Publication will resume Jan. 6, 2011, with a special year-in-review

edition. Check newsstands and mailboxes for a colorful front page, leading to month-by-month highlights of the Marshall Space Flight Center's 2010 accomplishments.

Classified ads will not run in the Jan. 6 issue. They will resume Jan. 13.

Marshall team members and retirees may still submit ads during the break through Inside Marshall or MSFC-INTERCOM@mail.nasa.gov.

The Daily Planet will cease publication Dec. 23 and will resume Jan. 3.

STS-133 *Continued from page 1*

the repairs to the Ground Umbilical Carrier Plate, or GUCP, which leaked an unsafe amount of gaseous hydrogen during Discovery's Nov. 5 launch attempt.

The stringer cracks developed as supercold liquid hydrogen and liquid oxygen were being drained from the tank Nov. 5, after NASA postponed Discovery's launch due to the hydrogen gas leak detected while filling the external tank. The 15-story-tall, orange external tank shrinks and expands as its temperature changes from the effects of the propellants. That change can cause the foam insulation on its outside to crack.

Engineers are continuing to search for the root cause of the stringer cracks through data analysis and tests, including placement of manufacturing defects in separate stringers to demonstrate structural integrity. This is being done in an effort to duplicate the same type of failure that occurred in November.

NASA is targeting Discovery's STS-133 launch on a mission to the International Space Station no earlier than Feb. 3 at 12:34 a.m. CST.

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

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, Jan. 13, is 4:30 p.m. Thursday, Jan. 6.

Miscellaneous

Pro-form C55 stationary recumbent cycle trainer, variable settings, \$200. 256-325-9264.
iPod Nano, 6th generation, orange, \$110 obo. 256-457-5823
Imperial Candlewick crystal, six ice teas, four water goblets, two sherberts, \$5 per stem. 256-585-3594
GE Profile gas clothes dryer, \$150. 256-651-5847
30" Frigidaire stainless refrigerator, ice maker, \$650. 256-883-2085

Bowflex Xtreme, \$400. 256-883-7851
Two orchestra tickets, Row I, Beauty and the Beast, Jan. 28, \$57 each. 256-883-2085
Lester Betsy Ross spinet piano, matching bench, curved legs on both, \$495. 256-883-2085
Size 1 pink/white Speed Freeks Rock Skates, sure-grip twister, \$70; guitar, \$65. 256-426-5042
27-inch JVC color television, tube, component video input, stereo sound, \$50 obo. 256-880-1544
Casio Privia PX-100 keyboard, stand, foot pedal, power supply, \$150. 256-603-4438
Art Deco waterfall cedar chest, \$125. 256-882-3895
Sax by Signature Music brass alto saxophone, mother of pearl keys, 25 keys, case, \$225. 256-658-3960
Ladies New Balance 442 Shoes, size 9, black/pink and white/gray, \$20 each pair. 256-655-6348
Rustic pine end tables, coffee table, pic available, \$75. 256-777-1810
Playstation 3 game, Little BIG Planet, Game of the Year edition, rated Everyone, \$25. 256-828-1234
40" Samsung LCD TV, 1080P. 256-426-1822
36" Samsung HD TV, \$150. 256-464-8933 after 5 p.m.
Browning Wildlife Series Limited Edition knives, turkey and goose, engraved wooden box, \$40. 256-812-1771

Bronze storm door/frame, \$50; three-remote/one-keypad Craftsman garage door openers, \$30; Eagle Transducer HS-WST, \$20. 256-527-0110

Vehicles

2010 Ford F150 XLT Supercrew, silver exterior, gray interior, 5,500 miles, \$26,000. 256-318-0078 or 256-895-0577
2006 Beetle convertible, 45k miles, \$11,800; 2001 Honda CRV, manual, 59k miles, \$8,800. 256-830-0248 evenings
2003 Chevrolet S10 extended cab, three door, hunter green, 47k miles, \$6,500. 256-434-0532
1985 Ford F-150, restored, 4WD, S-W base, hunter green, tan interior, \$2,950. 256-259-1523

Free

8-month-old male yellow lab, AKC registered, enjoys children. 256-423-5734, 8 a.m. - 7:30 p.m.

Wanted

Students interested in obtaining beginner to advanced scuba diver certification. 256-651-9909

Mason capable of rebuilding a courtyard wall with large bricked archways. 256-468-8177

Found

Garage door opener, Dec. 10, first row, south parking lot of Building 4200. 544-4680

'Tis the season for giving



Doug Staifer/MSFC

Many local boys and girls – both young and old – will have an abundantly blessed Christmas this year thanks to Marshall Space Flight Center team members in the Office of Strategic Analysis & Communications. The office joined together to adopt 64 angels from the Angel Tree – a program sponsored by The Salvation Army. With just some of the gifts delivered Dec. 8 to The Salvation Army are members of the OSAC team, from left, Tracy McMahan-Mayhan, historian/writer with Schafer Corp.; Steve Durham, deputy manager of the Public & Employee Communications Office; Brooke Boen,

senior Web editor with Schafer; Monique Joe, management support assistant with Deltha-Critique; and Linda Gomez, a program support specialist. About 1,050 gifts filled many bags in the first-floor pressroom in Building 4200, along with 16 bicycles and four tricycles. Donations and gifts were valued at about \$10,650. "The overwhelming response shows what a difference people make when working together," said Boen. "This is the 10th year that this office has participated in this Salvation Army program, and the results keep growing every year."

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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: MSFC-INTERCOM@mail.nasa.gov. The Star does not publish commercial advertising of any kind.

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