



MARSHALL STAR

Serving the Marshall Space Flight Center Community

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'One step closer to further exploring the moon'

NASA conducts second test of main parachute for Ares rockets

By Sherrie Super

NASA and industry engineers successfully tested the main parachute for Constellation Program rockets during a drop test Nov. 15 at the U.S. Army's Yuma Proving Ground near Yuma, Ariz.

The parachute system will allow Ares I and Ares V first stage boosters to be recovered and reused. The test validated the results of an earlier test conducted in September.

"Measuring 150-feet in diameter and weighing 2,000 pounds, this is the biggest chute of its kind that's been tested," said Steve Cook, director of the Ares Projects Office at the Marshall Center. "With each milestone, we bring ourselves one step closer to



Outfitted with a 42,000-pound weight, the 1-ton parachute was dropped from an altitude of 16,500 feet.

further exploring the moon."

The Ares Projects are managed out of the Marshall Center.

Exploring the moon and beyond is the focus of the Constellation Program, which is developing a new family of U.S. launch vehicles, spacecraft and related systems for exploration.

Booster recovery was the focus of the recent test, the second in a series. Outfitted with a 42,000-pound weight to simulate the load of a rocket's first stage, the main parachute was dropped from a U.S. Air Force C-17

aircraft flying at an altitude of 16,500 feet. The 1-ton parachute and all supporting hardware functioned properly, landing safely

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A gift for giving: CFC donations continue at Marshall

As the sixth week of the 2007 Combined Federal Campaign drew to a close, the Marshall Center's combined donations totaled \$459,801.78. The 2007 goal for Marshall's CFC donations is \$600,000.

Linda Vestal, executive vice chairperson for Marshall CFC promotions, said the campaign committee is working on a number of motivational products to help the center reach its goal. Marshall team members are encouraged to visit the Marshall CFC Web site, <http://cfc.msfc.nasa.gov>, and watch Inside Marshall for updates.

For more information, call Irene Taylor, Marshall's 2007 CFC executive chairperson, at 544-2051.

This month in history ...

Fifty years ago this month, on Nov. 3, 1957, the Soviet Union launched the world's second artificial satellite, Sputnik II. The Russian launch of Sputnik I, in Oct. 1957, marked the start of the space age and the U.S.-U.S.S.R. space race. Sputnik II remained in orbit until April 13, 1958, carrying a dog named "Laika." It was the first vehicle to carry a living organism into orbit.

The Sputnik launches led directly to the creation of the United States' own national space agency, the National Aeronautics and Space Administration, on Oct. 1, 1958.



NASA

Space shuttle Atlantis rolls to the pad

Shuttle Atlantis made its way to the launch pad at the Kennedy Space Center, Fla., Nov. 10, atop the mobile launch platform. Rollout was a milestone for Atlantis' launch to the International Space Station on mission STS-122, targeted for Dec. 6. Atlantis will deliver the Columbus module to the space station. The European Space Agency's largest contribution to the station, Columbus is a multifunctional, pressurized laboratory that will permanently attach to U.S. Node 2, called Harmony, which was delivered to the orbital outpost during the last shuttle mission, STS-120. The laboratory will expand the research facilities on board the station, enabling crew members and scientists from around the world to conduct a variety of experiments in the physical, materials and life sciences.



Parachute

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approximately three minutes later on the Yuma Proving Ground test range.

The Ares first stage booster recovery system is derived from the system NASA uses to recover the space shuttle's solid rocket boosters after launch. The first stage booster for Ares I is similar to the space shuttle's solid rocket booster but has an added fifth segment of propellant, resulting in a heavier load.

The current parachute tests are necessary to allow for differences between the space shuttle's four-segment boosters and the Ares launch vehicles. Testing is scheduled to run through 2010.

ATK Launch Systems near Promontory, Utah, is the prime contractor for the first stage booster. ATK's subcontractor, United Space Alliance of Houston, is responsible for the design, development and testing of the parachutes at its facilities at NASA's Kennedy Space Center, Fla.

About the first main parachute test

During the first test of the main parachute for Constellation Program rockets Sept. 25, the parachute was dropped from a slightly higher elevation of 17,500 feet, giving NASA engineers the opportunity to monitor parachute performance at a dynamic pressure of 86 pounds per square foot.

After the drop's completion, engineers spent several weeks reviewing test data — measuring the parachute's peak loads at opening, determining the canopy expansion rate during the early phase of inflation and measuring the parachute's drag area as it drifted to Earth.

The Constellation Program is managed out of NASA's Johnson Space Center, Houston, and Yuma Proving Ground provides the test range, support facilities and equipment.

The writer, an ASRI employee, supports the Office of Strategic Analysis and Communications.

Don't forget to take the Marshall Star Readership Survey

The Office of Strategic Analysis & Communications is conducting a Marshall Star Readership Survey to better understand the information needs of its readers.

The survey, printed in the Nov. 8 issue of the Marshall Star, also is available online through Dec. 7.

To participate, take the survey online at http://extweb.bah.com/NASA/Marshall_Star_Survey.html or print a copy from the survey site, fill it in and return it to: MSFC, Star Survey, Public & Employee Communications Office, Building 4200, Room 102-12, Huntsville, Alabama 35812. Please fill out only one survey per reader.

The survey should take no more than 15 minutes to complete and all feedback is strictly confidential.

Employee clearance system will be unavailable Nov. 29 to Dec. 3

Marshall's employee clearance system will be unavailable from close of business Nov. 29 through Dec. 3, according to the Logistics Services Office in the Office of Center Operations.

The employee clearance system is a mandatory process for retiring or resigning civil service and contractor employees to complete before turning in their badge to security and leaving the center.

Supervisors are asked to ensure that employees clearing the center during this time period have their government property reassigned to another employee or returned to the Logistics Services Office.

The office will not be able to access the database during this time period. Therefore, all employees affected must clear their property records before or after those dates. For assistance, contact Brendal Parsley at 544-3161.

Classified Ads

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

Miscellaneous

Two-year-old, side-by-side fridge, white, ice maker, filtered water in door, \$900. 783-1466

Cingular Blackberry 7100, holster, \$60. 651-4741

KitchenAid artisan mixer, 10 speeds, 5 quarts, 325 watts, black, \$200 firm. 539-6945

Vermont Castings defiant parlor stove, extras, \$500 obo; children's trainer water skis, \$25 obo. 883-7910

Yorkies, CKC registered, one male, two females, ready Nov. 27, \$500-\$600 each. 890-6193

Toshiba HD-A3 third generation DVD player, two HD movies, \$225. 656-0077

Four wood frame windows, 26x55; wooden Portacribs, \$10; Little Tikes highchairs, \$10. 337-6360

Girl's 15-speed bicycle, 26 inches, \$25. 353-8229

Pedestal glass top dining table, no chairs, \$50. 536-5132

Cremona full-size violin, bow, hardshell case, \$125 obo. 971-2066

Artley flute, silver, reconditioned, \$600 obo; Yamaha trombone, F attachment, 8-inch bell, \$900 obo. 881-1376

15-foot trampoline, safety enclosure, \$125. 658-8645

Broyhill entertainment center, three-piece, lighted, 35-inch RCA TV, \$695. 603-4950

Used Ferret cage, three levels, 18"x36"x54", \$75. 655-5436

7.5-foot Frasier fir artificial Christmas tree, stand, all parts, instructions, \$50. 880-1544

Nikon D50 DSLR, body only, all original accessories, 1 year old, \$475. 539-0476

Rolling engine stand, \$20; propane tank, \$4; Chevy billet truck grille, 1981-1987 model, \$10. 325-2919

Flexi 16-foot long retractable leash for small dog, \$10. 325-0085

Kenmore gas stove, white/gray, 4 years old, \$250 obo. 606-1717

Round wood and iron dining table, four matching chairs, \$200. 506-6106

Maytag Neptune dryer, 1 year old, front loading, large capacity. 602-4337

19-inch Viewsonic A90f CRT monitor, \$65. 883-2877

Delta compound miter saw, 10-inch blade, \$40. 694-1217

Cherry three-in-one crib/toddler/full bed conversion, mattress, \$75. 468-6261

Antique fainting couch, oak frame, \$125. 468-6261

Clayton-Marcus couch, \$350; sofa chair, hassock, \$350. 426-4903

Brown chaise lounge, no delivery provided, \$200 obo. 652-2241

Round diamond solitaire ring, .75 carats, diamond wrap, .50 carat anniversary band, \$1,300 obo. 426-7862

Vehicles

2007 Honda TRX450R Sport ATV/quad, electric start, plastics black/flames, red frame, \$5,200. 345-9555

2006 Black Jeep Liberty, auto, gray interior, 28k miles, \$15,500. 651-3626

2005 Honda VTX1300R motorcycle, many accessories, 8,800 miles, \$7,500. 564-7499

2004 Suzuki XL7, third-row seat, four door, warranty, gold, 35k miles, \$13,500. 694-0388

2004 Toyota Sequoia, third-row seats, TRD racing package, Borla mufflers, 61k miles, \$18,900. 351-0112

2003 Escalade, loaded, DVD, \$22,000; 2006 Chrysler 300, leather, \$20,000; 1994 Mercury Cougar, \$1,750. 520-2802

2001 Mazda Miata LX, leather, power windows, black/tan, 60k miles, \$10,900. 883-6894 or 468-6894

2000 Hyundai Elantra, assume payments of \$272. 658-6353

1997 Toyota Camry, \$3,900. 534-6831 or 797-7204

1997 Saturn SLI, four door, five speed, 28 mpg, new tires, 147k miles, \$2,400. 682-7165

1995 Toyota 4-Runner, red, 2WD, engine reworked, 150k miles. 355-6858

19-foot Bayliner Capri Bowrider, 125 hp, trailer, covers, extras, \$4,000. 653-3647

Wanted

PC133 SDRAM 168-pin memory for Intel PC, at least 256 or 512MB. 859-5089

Suspended ceiling parts, 24-inch cross-tees, older style for 25- to 40-year-old grid system. 233-0705

Hitting the field — to inspire future science, math, technology grads



Marshall Center Deputy Director Robert Lightfoot, center, tosses the opening coin at the Nov. 3 match-up between the Alabama A&M University Bulldogs of Huntsville and the Jackson State University Tigers of Jackson, Miss. Lightfoot and dozens of other Marshall Center employees were out to support Alabama A&M's annual Senior/NASA Day, in which thousands of high school seniors from around the country visited the school — and looked closely at future careers in the technical fields: math, science, engineering and technology. The Marshall Center cosponsors the event each fall.

David Higginbotham/MSFC

Tree lighting to be held Nov. 28

Marshall team invited to celebrate 50 years of holiday cheer

Marshall Center team members are invited to celebrate 50 years of NASA holiday cheer at the lighting of Marshall's holiday tree in front of Building 4200 on at 4 p.m. Nov. 28.

A member of the Marshall Center senior management will officially kick off this Marshall tradition with wishes for a safe and happy holiday season.

NASA Exchange-MSFC preordered nuts are available for pick up

The pecans and other assorted nuts preordered through the NASA Exchange-MSFC are now available for pickup from 8 a.m. to 3 p.m. daily in the Wellness Center, Building 4315. A limited supply of extra nuts is available for purchase in the Space Shop, Building 4203.

For more information, call 544-2185.

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