



MARSHALL STAR

Serving the Marshall Space Flight Center Community

Sept. 28, 2006

Solar-B launched Sept. 22

NASA teaming with Japan, United Kingdom and Europe to study the sun



Solar-B launches from Uchinoura Space Center in Kagoshima, Japan.

By Sherrie Super

Solar-B, an international mission to study the sun, launched Friday, Sept. 22, from Uchinoura Space Center in Kagoshima, Japan.

The launch vehicle flew smoothly, and mission controllers have confirmed the satellite's successful placement into its scheduled orbit. In orbit, Solar-B's newly given nickname is "Hinode" — or sunrise.

The mission seeks to shed new light on the sun's magnetic field and how it impacts life on Earth. NASA prepared major instrument components for the spacecraft, with the Marshall Center managing development of the scientific instrumentation provided by NASA. The effort also was supported by academia and industry.

"Solar-B will record how energy stored in the solar magnetic field is released as that field rises into the sun's outer atmosphere," said Larry Hill, Solar-B project manager at Marshall.

Solar-B's three instruments — the Solar Optical Telescope, the X-ray Telescope and the Extreme Ultraviolet Imaging Spectrometer — will perform coordinated measurements of the different layers of the solar atmosphere. Continuous, simultaneous observations of specific solar features by all three instruments will enable Solar-B to observe how changes in the magnetic field at the sun's surface spread through the layers of the solar atmosphere.

The Japan Aerospace Exploration Agency, or JAXA, is the overall lead for the Solar-B mission, the spacecraft, the launch vehicle and management of space operations. NASA provided the Focal Plane Package for the Solar Optical Telescope,

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Tennessee Valley CFC kickoff attendees challenged to exceed goal

By Rita Roberts

At the Sept. 19 kickoff for the Tennessee Valley Combined Federal Campaign, officials from the Marshall Center, Army and other federal agencies encouraged potential donors to reach and exceed this year's goal of \$1.8 million.

The annual campaign is an initiative by federal and military

personnel to raise money for local charities. The kickoff, held at the NASA Picnic Area, drew more than 500, including employees of the Marshall Center and Army organizations on Redstone Arsenal, and representatives from more than 30 federal agencies in Cullman, Lawrence, Limestone, Madison, Marshall and Morgan counties in

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Atlantis crew arrives safely back to Earth



NASA/KSC

Safely back on Earth, the STS-115 crew poses at the Shuttle Landing Facility at the Kennedy Space Center, Fla., in front of Atlantis. The orbiter carried them on their 12-day mission, Sept. 9 to Sept. 21, to the International Space Station. From left are mission specialists Dan Burbank and Heidemarie Stefanyshyn-Piper; mission specialist

Steve MacLean of the Canadian Space Agency; pilot Chris Ferguson; commander Brent Jett; and mission specialist Joe Tanner. The crew delivered and installed the massive P3/P4 truss, an integral part of the station's backbone, and two sets of solar arrays that will eventually provide one quarter of the station's power.



Emmett Given/MSFC

NASA brings Vision for Space Exploration to Tanner High School students

From right, NASA astronaut Dominic Antonelli; Marshall Center Director David King and his wife, Lisa; Jim McCamy, district director for U.S. Rep. Bud Cramer of Alabama; and Limestone County Commissioner Bill Latimer help celebrate the selection of Tanner, Ala., High School as a 2006 NASA Explorer School. They joined Limestone County School Board members at NASA's newest Explorer School — a NASA program to help schools increase student interest in science, technology, engineering and mathematics. King and Antonelli spoke at the Sept. 22 school assembly, sharing with students and teachers the Vision for Space Exploration — the nation's effort to extend a human presence throughout the solar system. They also discussed how science and space research enhance life on Earth.

The face of mission success is:

Gene Fundum, team lead in the Property Management Office of the Logistics Department in the Office of Center Operations

As the team lead for the Property Management Office, Gene Fundum not only ensures that Marshall employees who are being relocated around the center experience a smooth move, but also he makes sure employees have a comfortable place to sit and eat at special events such as the Marshall Fall Cookout, plus a whole lot more.

What are the key responsibilities of your job?

I lead the Property Support Services team that monitors the EG&G Logistics Services contract providing personnel move services, property moves, property for special events, warehousing, fuel support, the Marshall retail store, center cafeterias and property disposal. My team also provides consultant support to the Supportability Engineering Acquisition Logistics Branch for the upper stage of the Ares I crew launch vehicle.

What is your education background?

I received my bachelor's degree in human resources administration from St. Leo University, St. Leo, Fla.

I graduated from Troy University in Troy, Ala. with a master's degree in management. I retired as an Army officer in 1989 after serving 20 years on active duty. Since then, I've worked in industry for two defense contractors, and owned and operated the Fundum Insurance Agency in Huntsville for four years prior to joining Marshall.

How many years have you been at the Marshall Center?

I've been here since 2000.

What services does your job provide in support of the center's mission?

The logistics services team touches a lot of the everyday things that happen to all employees. If employees are physically moving, my team performs the actual move. When employees need

equipment, material or even files moved around the center to help them do their jobs, we are the ones that move those items. With special events such as the Marshall Fall Cookout, Safety Day or the Combined Federal Campaign, we make sure the tables and chairs are all in place.

Our team is also responsible for about 144,000 square feet of storage space. We store equipment and material such as rocket engines, titanium, aluminum, stainless steel, pumps and valves

until needed by the engineering community. We also approve the purchase requests for propane gas used by the labs. Along with that, my team oversees the operation of the Marshall retail store where organizations can buy everything from commercial chemicals to office supplies and furniture.

We also provide consultant services to the Supportability Engineering Acquisition Logistics Branch for the upper stage of the Ares I crew launch vehicle for government furnished property and warehousing. We are assisting the branch to produce a Government Furnished Property Plan that — after being approved by NASA Headquarters — can be handed over to the winner of the contract to build the final vehicle. We are also providing

warehouse support to the Ares I crew launch vehicle team. In this capacity, we will store equipment such as the rocket engines and material needed to build the prototype vehicle.

What do you hope to accomplish in your role this year?

My team's goal is to provide the best services we can to our Marshall customers while staying within the financial and policy constraints placed on us.

What is the biggest challenge you face?

Most of the services we provide require a change in the lives of our customers. The employee can perceive the adjustment as

See Fundum on page 8



Doug Steffer/MSFC

Gene Fundum, team lead in the Property Management Office.

Marshall employees enjoy food and festivities at 2006 Marshall Fall Cookout

Great weather, good food and lively entertainment attracted thousands of Marshall team members to the annual cookout Sept. 21. Marshall manager May Wales, left, with the Office of Center Operations, was one of many volunteers to serve barbecue and all the trimmings to co-workers.



At this year's cookout, Marshall employees were treated to unique displays with a tribute to the past, present and future. Antique vehicles, owned by employees, were brought in for the Car and Transportation Expo. In the background, a model of the Space Shuttle and NASA's next-generation spacecraft, the Ares I crew launch vehicle, were on display.

Doug Stoffer/MSFC

Obituary

Robert Evan Lake, 73, of Huntsville died Aug. 1. He retired from the Marshall Center in 1998 where he held positions in engineering and management. He is survived by his wife, Jean W. Lake; three sons, Robert Evan Lake Jr., Thomas Brett Lake and Daniel Patrick

Lake all of Huntsville; one daughter, Patricia Ann Penrod of Huntsville; two stepdaughters, Elizabeth King Conroy of Avon Lake, Ohio, and Emily Anne Clark of Huntsville; and one sister, Lizabeth Johnston of Tampa, Fla.

Solar-B

Continued from page 1

and components for the X-ray Telescope and the Extreme Ultraviolet Imaging Spectrometer, as well as engineering support for integration of the instruments.

The Solar Optical Telescope will be the first space-borne instrument to measure the strength and direction of the sun's magnetic field in the sun's low atmosphere, also called the photosphere.

The sun's outer atmosphere, the corona, will be captured by the X-ray Telescope. The corona is the spawning ground for solar flares and coronal mass ejections. Powered by the sun's magnetic field, this explosive solar activity produces significant effects in the space between the sun and Earth. By combining observations from Solar-B's optical and X-ray telescopes, scientists will be able to study how changes in the sun's magnetic field trigger these powerful events.

The Extreme Ultraviolet Imaging Spectrometer will measure the speed of solar particles. The spectrometer provides a crucial link between the other two instruments, measuring the layers that separate the photosphere from the corona — an area known as the chromosphere and the chromosphere-corona transition region. The spectrometer also will be able to measure the temperature and density of solar plasma — the hot, ionized gas surrounding the sun.

"The information that Solar-B will provide is significant for understanding and forecasting of solar disturbances, which can interfere with satellite communications, electric power transmission grids and threaten the safety of astronauts traveling beyond the safety of the Earth's magnetic field," said John M. Davis, Solar-B project scientist at Marshall.

The Solar-B spacecraft is circling Earth in an orbit that will place the instruments in continuous sunlight for

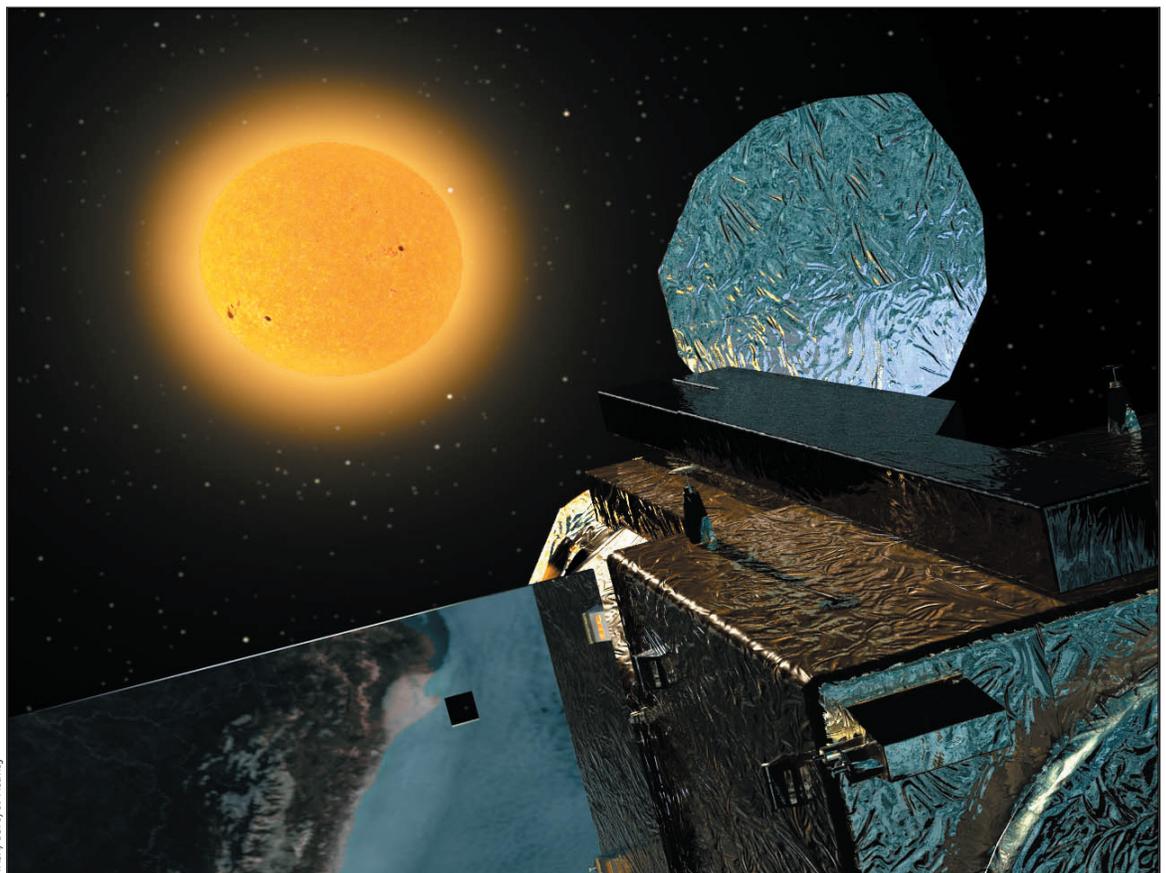
nine months each year. NASA and the science teams are supporting instrument operations and data collection from the spacecraft operations center at JAXA's Institute of Space and Astronautical Science, or ISAS.

Participating in the development of the instrumentation for the Solar Optical Telescope were NASA; Lockheed Martin in Palo Alto, Calif.; the High-Altitude Observatory in Boulder, Colo.; JAXA's Institute of Space and Astronautical Science in Sagamihara, Japan, or NAOJ; and the National Astronomical Observatory of Japan in Tokyo.

The X-ray Telescope was built by the Smithsonian Astrophysical Observatory in Cambridge, Mass.; JAXA/ISAS; and NAOJ. The spectrometer was developed by the Mullard Space Science Laboratory of the University College London in the United Kingdom; the Naval Research Laboratory in Washington; and NAOJ.

Solar-B is a collaboration among the space agencies of Japan, the United States, the United Kingdom and Europe. The mission is part of the Solar Terrestrial Probes Program within the Heliophysics Division of NASA's Science Mission Directorate in Washington.

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



NASA/GSFC/C. Meany

Artist concept of Solar-B during observation of the sun.

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Alabama and Lincoln County, Tenn.

Charles Chitwood, Marshall Center deputy director, was one of the featured speakers and encouraged Marshall employees to give generously, participate in the bus tours and community service days, and exceed the campaign goal. This year's theme, "Compassion In Action," was highlighted throughout the festivities, which included testimonials from Bruce O'Gorman, a lead logistics management specialist, Aviation Ground Support Equipment Program Management Office at the U.S. Army Aviation & Missile Command, Redstone Arsenal; and Paula Bolline, an administrative support assistant with the National Weather Service Weather Forecast Office, Huntsville. Participants were also encouraged by campaign challenges from speakers; and displays by local charitable organizations that provided information about each agency.

"I am excited that we had such a good turnout for the kickoff," said George Myers, an engineer in the Spacecraft & Vehicle Systems Department in the Engineering Directorate, and the Marshall 2006 CFC executive chairperson. "I am sure Marshall employees are up to the challenge and will exceed Marshall's goal of \$575,000."

At the agency fair, 80 local charities provided attendees a chance to learn about the benefits of the campaign across the Tennessee Valley. Marshall employees also can participate in the Marshall bus tours, which began Sept. 22. The tours visit agencies that are

recipients of CFC funds, ranging from local hospitals to botanical gardens, to demonstrate how local charities and CFC dollars are making a difference.

- The following agency tours are available to Marshall employees:
- Thursday, Sept. 28, 9-11 a.m.** – Alabama Center of Military History
 - Monday, Oct. 2, 1-3 p.m.** – Children's Hospital of Alabama, the Huntsville clinic
 - Tuesday, Oct. 3, 9-11 a.m.** – Huntsville-Madison Rescue Squad Inc.
 - Tuesday, Oct. 3, 1-3 p.m.** – Burritt Museum Association Inc.
 - Wednesday, Oct. 4, 9-11 a.m.** – Therapy Partners Inc., animals as partners
 - Wednesday, Oct. 4, 1-3 p.m.** – Huntsville Hospital Foundation
 - Thursday, Oct. 5, 9-11 a.m.** – Huntsville-Madison County Botanical Garden Society Inc.

To sign up for one of the Marshall tours, visit the CFC Web site at <http://cfc.msfc.nasa.gov>.

Buses will pick up participants in the parking lot on the south side of Building 4203. Participants should arrive at the pickup point 15 minutes prior to the start of the tour. To arrange special transportation needs, call 4-TAXI.

For additional information, contact Mark Boudreaux at 544-1276, or e-mail mark.e.boudreaux@nasa.gov.

The opportunity to give to the CFC begins Oct. 9 and continues through Nov. 17.

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



Charles Chitwood, Marshall Center deputy director, center, joins Donna Johnson, left, coordinator of the Tennessee Valley Combined Federal Campaign and chair of the Local Federal Coordinating Committee, and Rosa Kilpatrick, Marshall CFC representative to the Local Federal Coordinating Committee, at the kickoff event.

Doug Stoffer/MSFC

'Focus on Marshall' looks at Marshall TV and thermal testing

By Lori Meggs

Marshall Center employees can catch the newest edition of "Focus on Marshall," highlighting capabilities around the center, on Marshall TV beginning Tuesday, Oct. 3.

This month's program features a segment on the Marshall Center's world-class Thermal Testing Facility, part of the Materials Environments Test Complex, now being used to test how ice forms on the shuttle ice frost ramps, and to determine how ice might form on a re-designed version of the ramps. Located in the East Test Area, the facility is part of the Test Laboratory in Marshall's Engineering Directorate.

A second segment showcases the capabilities of Marshall

Television in the Office of the Chief Information Officer. Marshall TV provides the center everything from video documentation to tape duplication to the production of live and taped events and programs, such as "Focus on Marshall."

"Focus on Marshall" airs on Marshall TV and Desktop TV the first and third Tuesday and Thursday of each month at 11 a.m., noon and 1 p.m.

The program also will be posted on Inside Marshall and the Marshall home page within the NASA portal Web site.

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

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 is 4:30 p.m. Thursday.

Miscellaneous

John Deere 345 lawn tractor w/power bagger & 2-wheel cart, \$4,200; MTD chipper/shredder, \$150. 729-8020

Magwheels, Niche Spikes, 17", Kumho tires, 75 percent tread left, \$350. 468-4107

China cabinet, Walnut, filled with Pfaltzgraff dishes, \$350; Sofa 10' long, \$200. 852-6952

KitchenAid 27" double oven, dishwasher, electric cook-top; Whirlpool 25 cu. ft. side-by-side refrigerator, used, make offer. 837-4136

Chipper/shredder, heavy duty, MTD, Briggs & Stratton 5HP, \$150. 931-967-8972

Men's left-handed golf clubs, woods 1-3-5, irons 3-9, PW, SW, putter, no bag, \$125. 882-3983

Sony KV-27FS13 27" television, matching Sony stand, manual and remote included, \$350 for both. 256-457-1196

Computer armoire, 3 slide-out shelves, \$300. 971-1712

Cell phone, Z500 SE with accessories, \$54; Canon A80 digital camera w/swivel LCD screen, \$149. 655-1986

This End Up' furniture: trundle-bed, nightstand, desk, bookcase, toy-chest, entertainment center, chest, chair, \$1,200. 350-1292

Concrete Heebee Lady, can be used as fountain, and two pedals, \$70. 851-0008

eMachines, 17" SVGA CRT monitor, (e-View 17f3 Model #786N), \$35. 256-722-0997

Key City sofa and loveseat, double camel-back style, green, burgundy, gold, \$1,500. 461-0605

Miniature Dachshund puppies, APR papers, 4 males, parents onsite, ready 11/4, \$250. 233-5620

Storm window, heavy-duty metal frame, slide up to open, 36"x39", \$10. 837-6776

Purebred Australian Shepherd puppy, merle, 6-weeks-old, female, first shots, wormed, vet checked, \$85. 256-561-2287

Kayak, Perception Torrent 10.1 sit-on-top, hot pink, up to class IV rivers, \$250. 714-3504

Four side-by-side burial plots, Valhalla Masonic Garden, \$6,000. 881-9421

Philips commercial type floor scrubber and polisher, \$25. 256-881-8879

Trailer, 5'x9', lights, spare tire, removable wood floor w/wire mesh under, \$350. 859-5624

Oak entertainment center w/recessed lights, adjustable shelves, storage, holds up to 36" TV, \$500. 829-0285

2004 Fleetwood pop-up camper, 8', w/roof, heat/air. 256-739-6700

GM stainless steel tubular assist steps, fits all 2002-2004 Chevy Avalanche, \$495. 426-9983

Hotpoint washer and dryer, all hoses included, \$75 for pair. 864-8094 after 4 p.m.

Magic Chef side-by-side refrigerator, ice and water in door, \$225. 880-7381

Yamaha golf cart w/roof, gas powered, \$1,000. 534-8414

Royal Kiroune Kirman Persian carpet, Belgian weave, 8'x11', RN58879 Ivory, clean stored, \$400. 684-9000

Roll around grill, Foreman-style, integrated Thermos ice chest, Grill2Go/Fire-N-Ice, new in box, \$100. 233-0705

Vehicles

2003 Toyota Matrix, auto, white, non-smoker, 73K miles, \$9,600. 527-8116

1971 Ebbtide fishing boat, 13', two-chair, 40HP outboard, trailer, \$1,100. 885-2293

Nomad travel trailer, 26', A/C, heater, for hunting/fishing, needs work, \$700. 426-4149

2006 GMC Sierra crewcab pickup, V8, 20" wheels, white, 7.4K miles, \$24,900. 206-0792

1998 Chevy Blazer, 4x4, 117K miles, \$3,300. 256-739-2043

1985 Toyota Celica, 165K miles, \$600. 881-1895

2001 Suzuki 80 four-wheeler, \$800. 684-6271

1978 Chrysler LeBaron, V8, auto, 4-door, PS/PB, air, \$525. 348-7146

1997 Expedition, Eddie Bauer, black, 4WD, leather, rear air, 3rd seat, \$7,900. 353-9068

1994 Camry LE, 118K miles, \$3,300. 497-4484

1990 Plymouth Voyager, rebuilt engine and transmission, \$500. 426-4325

2003 Alero, silver, V6, all-power, new tires, warranty, 37K miles, \$10,500. 508-1381

1996 Cavalier mobile home, 16x71, 2 bedrooms, 2 baths, w/upgrades, \$71,800. 256-289-6266

1990 Wellcraft Overnighter 2200V, Mercruiser V8, molded swim platform, captain's chairs, cuddy cabin, fridge/stove, \$12,000. 797-6173

1998 Corvette convertible, 13K miles, loaded, triple black, 162 mph, \$30,000. 837-1774

2000 Z71 4-door pickup, new tires and rims, \$8,900. 679-0694

1984 Revcon motor home, 33', runs, needs some repair, interior good, \$9,000, OBO. 256-603-6852

2006 Chevy Silverado 4x4, crewcab, red, CD, tint, V8, auto, 20" factory wheels, \$24,000. 256-426-3355

1999 GMC Suburban, white, tan leather, 2WD, loaded, RES, 135K miles, one-owner, \$10,500. 679-7037

2002 Chevy Tahoe LS, white, 4WD, V8, automatic, all-power, 45K miles, \$17,000. 852-6548

1998 GMC Suburban, 4x4, 140K miles, new transmission, leather, 3rd seat, rear air, \$6,800. 520-0715

2003 Volkswagen Jetta GLS, 45K miles, leather, sunroof, 5-speed, \$15,000. 651-9661

2000 Chevy Silverado extended cab, Z71, 3rd door, bed-liner, gray, 165K miles, \$8,800. 508-6844

Wanted

Used baby items: crib, swing, clothing, car seat, stroller, etc. 256-655-1733

Found

In NSSTC Annex, a USB token. Call 961-7584 to identify/claim.

Marshall's newly appointed Senior Executive Service employees gather at senior staff meeting



Emmett O'Leary/MSFC

Marshall Center Director David King stands with Marshall executives who were recently appointed to NASA Senior Executive Service positions. The Senior Executive Service is the personnel system that covers most of the top managerial, supervisory and policy positions in the executive branch of the federal government. In the photo, from left, King; Steve Cash, deputy manager of the Shuttle Propulsion Office; Byron Butler, deputy director of the Office of Procurement; Rose Allen, director of the Office of Strategic Analysis and Communications; Todd May, deputy manager of the Science & Mission Systems Office; and Danny Davis, manager of the Upper Stage Office, Exploration Launch Projects Office.

Fundum

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positive or negative. Most of the time, the change is a result of a management decision. Our team is asked to help implement the change. The vast majority of customers we serve take the situation in stride, but there are a few who are reluctant. Our challenge is to implement

the change as smoothly as possible without alienating those customers. We may not always succeed, but we work hard to make it right.

On the personal side, how do you like to spend your leisure time?

I love spending time with my wife, Patty, who also works at Marshall in the

Engineering Directorate; our son, Shane; his wife, Anissa; and our two grandchildren, Kaylee, 5, and Ty, 3, who live in Dothan, Ala. I also enjoy playing golf, boating, fishing and watching college football — especially Nebraska and my alma mater, Troy.

The writer, an ASRI employee, is the Marshall Star editor.

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