

Bruce Anderson reassigned to new position of special counsel for Michoud Assembly Facility Transition

Bruce Anderson has been reassigned to the new position of special counsel for the Michoud Assembly Facility Transition. In this role, he will serve as legal advisor to the Michoud Transition director and transition team regarding a broad array of legal, regulatory and policy issues affecting Michoud transition activities.



Bruce Anderson

Anderson brings to this position more than 30 years of diverse legal and environmental experience. Prior to joining NASA, he served with the U.S. Army Corps of Engineers as senior assistant district counsel; district trial attorney for the Mobile, Ala., district; and district counsel for the Memphis, Tenn., district.

Anderson joined NASA in 1986 as deputy chief counsel for Goddard Space Flight Center in Washington. In 1989, he returned to the U.S. Army Corps of Engineers as division counsel for the Missouri River Division in Omaha, Neb., providing legal leadership and management for an 11-state region.

In 1991, Anderson was named senior counsel for environmental compliance for the U.S. Army Corps of Engineers Center for Hazardous

and Toxic Waste in Omaha. From 1994 to 1998, he served as counsel of the U.S. Army Corps of Engineers' Transatlantic Programs Center in Winchester, Va. In this position, Anderson provided legal leadership and management for engineering, design, construction, operations and maintenance projects in Europe, the countries that made up the former Soviet Union, the Middle East and Africa.

Anderson returned to NASA and was appointed to the Senior Executive Service in February 1998. He served as chief counsel for Kennedy Space Center, Fla., until he joined the Marshall Center in 2003.

In 2004, Anderson authored the agencywide policy directive that created and defined NASA's Ombuds Program, which provides the civil service and on-site contractor workforce with an informal, independent, confidential, and neutral channel to communicate and facilitate resolution of issues and concerns related to safety, organizational performance or mission success without fear of retribution. He has served as Marshall's ombudsman since 2004.

In 2005, Anderson was selected to serve as chief operating officer of the National Space Science and Technology Center in Huntsville, a consortium of state research universities co-founded and operated by NASA and the Alabama Space Science and Technology Alliance.

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Garry M. Lyles reassigned to SES position of associate director for Technical Management in Marshall's Engineering Directorate

Garry Lyles has been reassigned to the Senior Executive Service position of associate director for Technical Management in Marshall's Engineering Directorate.

He will be responsible for planning, directing, and coordinating engineering project management and integration activities in support of the directorate's technical activities. Lyles also will represent the Engineering Directorate at critical milestone reviews, boards, and panels for programs and projects executed at the Marshall Center.

The Senior Executive Service is the personnel system covering top managerial positions in approximately 75 federal agencies.

With more than 31 years of NASA experience, Lyles has technical background and extensive experience in technology program and project management. He began his NASA career in 1976 as a propulsion systems analyst in Marshall's Science and Engineering Directorate. Since then, Lyles has held numerous leadership positions in propulsion systems and advanced space transportation development, including manager of the Propulsion Office in the Second Generation Reusable Launch Vehicle Program Office, and manager of the Advanced Space Transportation Program. In 2004, he served a one-year detail at NASA Headquarters as manager



Garry M. Lyles

of the new Constellation Program where he was responsible for establishing the initial office structure and recruiting agency personnel to formulate a plan for transitioning the Orbital Space Plane and Next Generation Launch Technology programs to the Vision for Space Exploration. In 2005, Lyles was selected to serve as the first chief engineer for the Exploration Systems Mission Directorate at Headquarters, a position he held until

June 2007 when he rejoined Marshall.

Lyles earned a bachelor's degree in mechanical engineering from the University of Alabama in Tuscaloosa. He has completed numerous executive- and management-level training courses and is the recipient of several awards, including the NASA Medal for Exceptional Service, NASA Medal for Exceptional Engineering Achievement, and two Presidential Rank Awards for Meritorious Service, one of the highest honors given for government service work.

THE FACE OF MISSION SUCCESS IS:

Mark Rogers

*Deputy of the Spacecraft Propulsion Systems Branch in the Propulsion Systems Department
in Marshall's Engineering Directorate*

As a student at Whitesburg Elementary School in Huntsville in the 1970s when the Marshall Center performed space shuttle main engine tests, Mark Rogers remembers sitting in class and feeling the thunderous vibrations.

"Marshall would literally rock Huntsville with these engines. I thought that was awesome, and I made it my goal to work at NASA," said Rogers. Now deputy chief of the Spacecraft and Auxiliary Propulsion Systems Branch in the Propulsion Systems Department in Marshall's Engineering Directorate, Rogers not only fulfilled his childhood dream, but he and his group are heavily involved in designing and developing the Ares I-X flight test vehicle scheduled for launch in 2009 and the Ares I crew launch vehicle.



David Higginbotham/MSC

Mark Rogers

using this experience to support our partners at Glenn. In addition, we are responsible for the advanced development of rocket engines using non-toxic propellants. This means my group and I are

searching for ways to reduce the toxic impact of the chemicals used in conventional spacecraft propulsion systems. Often the propellants in these systems are toxic — typically these are monomethylhydrazine (fuel) and nitrogen tetroxide (oxidizer) — so we are developing oxygen-methane and oxygen-hydrogen propellant combinations to limit the hazards to ground operations personnel. These non-toxic propellants also offer performance improvements compared to conventional

storable propellants and are linked to NASA's goals to use propellants that can be produced on Mars.

What is your education background?

I earned my bachelor's degree in electrical engineering from the University of Alabama in Tuscaloosa in 1987.

What are the key responsibilities of your job?

I am responsible for helping manage the Spacecraft and Auxiliary Propulsion Systems Branch. My group and I lead the overall system analysis, design, integration and evaluation of pressure-fed chemical propulsion systems, such as the Ares I auxiliary propulsion systems for the Ares I and Ares I-X vehicles. Our work also includes engine development, system development and flight support for spacecraft propulsion systems, such as Chandra, the Orion Service Module and future lunar missions.

We are presently developing the first stage roll control systems that go on the Ares I and Ares I-X vehicles. The roll control system counteracts the roll induced by the first stage solid rocket and aerodynamic loads from liftoff to second stage separation, helping to assure that the first stage stays within the required orientation for the first two minutes of flight. We are also leading the development of the upper stage reaction control system for Ares I.

My branch also is responsible for oversight and evaluation of the main propellant tanks for the Orion Service Module managed by Glenn Research Center in Cleveland, Ohio. We have extensive spacecraft propellant tank expertise here at Marshall, so we are

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

Our work is directed to the mission of bringing the Ares I into service to replace the shuttle for crew transport to the International Space Station and future exploration missions to the moon. Since this group is responsible for the development of the auxiliary propulsion systems that support the Ares I and Ares I-X test flight, we are right in line with the development of the new launch vehicles to meet the NASA mission.

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

My group and I have a couple of very large milestones. In developing large elements of a vehicle or components of a vehicle, such as the roll control system, we have to go through normal programmatic milestones. This includes the System Requirements Review, Preliminary Design Review and the Critical Design Review. For the Ares I, we have our first Preliminary Design Review coming up in December. In this review, my group and I subject our work to an intense review by our peers and by the agency's discipline experts. Since this is our design, we have to show that our design meets its requirements safely and within acceptable levels of risk.

In addition, we have the Critical Design Review for the Ares I-X roll control system underway now. If we can develop a very solid engineering

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climate? The researchers will try to find out.

TC4 researchers will have many tools at their disposal including several NASA satellites, three NASA aircraft (the ER-2, WB-57 and DC-8), weather radars and a number of meteorological balloons. Each tool has a key role to play in piecing together the storm's "big picture," by gathering data on dust aerosols, carbon monoxide, lightning, water vapor concentration, wind speed, infrared emissions and more.

The Advanced Microwave Precipitation Radiometer, or AMPR, is a particularly innovative tool and will fly on the NASA ER-2. Developed at the Marshall Center, AMPR uses four different microwave frequencies to map the types of precipitation in a storm. Through this kind of mapping, the AMPR can show how intense a storm is. The scientists can then determine whether or not differences in the cirrus clouds generated at the top of the thunderstorm's anvil are a result of storm intensity.

Like the ER-2, the NASA DC-8 will carry several weather instruments. This aircraft will seat about 35 researchers.

Marshall's veteran atmospheric scientist Robbie Hood, who works at the National Space Science and Technology Center in Huntsville, has flown in a DC-8 during other weather experiments. She says,

"When you are flying on the plane in the storm, you can look out of the window, and all the scientists are talking back and forth about the experiment, and it's very exciting. ... But there have been times when I wanted to be sitting at my desk, because I was wishing to see the satellite or radar picture at that moment."

If she flies in the DC-8 during the TC4 field campaign, her wish will come true. A new tool called Real Time Mission Monitor, or RTMM, developed at the Marshall Center will integrate all of the instruments' data and display it in living color

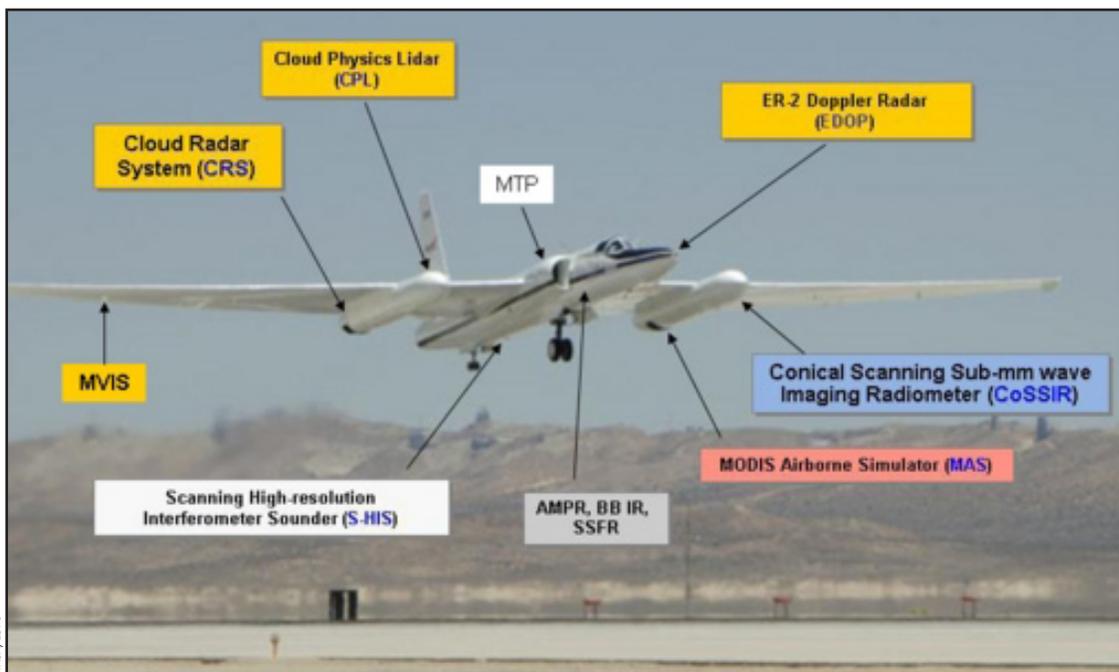
on all the researchers' computer screens, overlaid on a map of the Earth. With this tool, all the scientists can see the information at the same time, as it happens, whether they are in Costa Rica or the United States, or flying in the DC-8 at 40,000 feet.

Each field campaign participant can view radar, infrared, water vapor concentrations, lightning and other data. At the same time, the researchers will be communicating with one another via instant messaging. This means that no matter where they are during the experiment, the scientists can see all the data and talk about it among themselves.

"I think this tool will spark people's imaginations," says Hood. "When you are looking at data live in real time, you see things differently than when you look at the data two weeks later at your desk. And when you have a lot of scientists focusing on something together in real time, it sparks imagination, conversation and collaboration. It will speed the way we can make discoveries."

Using the state-of-the-art tools developed by the Marshall Center, TC4 researchers will collect, share and analyze comprehensive data to help climatologists understand some of the weather dynamics that influence climate change.

The writer, a Schafer Corp. employee, supports the Office of Strategic Analysis and Communications.



NASA's ER-2 aircraft carries state-of-the-art instruments to collect weather data.

Anderson

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A native of Petersburg, Va., Anderson received a bachelor's degree in civil engineering in 1971 and a law degree in 1975, both from the University of Alabama in Tuscaloosa. He has received a number of Department of the Army and NASA

leadership and achievement awards. In 1999, he received the Hammer Award for his leadership role in the NASA/Air Force Joint Base Operations and Support Contract. The Hammer Award was created by Vice President Al Gore to recognize government efficiency as a part of the National Partnership for Reinventing Government.

Dan Irwin to speak at Marshall Association luncheon Aug. 14

The Marshall Association will hold its next luncheon meeting at 11 a.m. on Tuesday, Aug. 14, in the Galileo conference room at the Jacobs Conference Center, 1500 Perimeter Parkway, Suite 100.

Dan Irwin, a Marshall research scientist in the Science and Mission Systems Office, will present information on SERVIR, a regional visualization and monitoring system that integrates

satellite and other geospatial data for improved scientific knowledge and decision making. The 2007 Marshall Association scholarship winners will also be announced.

Tickets are \$11 for Marshall Association members and \$13 for non-members. The cost is payable at the door, but interested parties should contact Beth Shelton at 544-9212 or elizabeth.c.shelton@nasa.gov no later than noon Friday, Aug. 10, to reserve seats. Seating is limited to 50 people.

In an effort to reduce the impact to the scholarship fund resulting from recent increased number of "no shows" (an out-of-pocket expense for the association), everyone who makes a reservation but is not able to attend will be responsible for paying the cost of his/her lunch or sending a replacement attendee.

Rogers

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design for these two systems, I would consider this year a real success.

What is the biggest challenge you face?

Bringing engineers together with a diverse background and skill set to work together as a functional, productive team is a challenge. Through this challenge, watching an engineer become productive or seeing a team pull through a challenging task is the most rewarding

experience I have had as a supervisor.

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

I spend most of my time on the baseball field with my two sons, Garrett, 12, and Blake, 9. We also enjoy hunting and fishing when it's not baseball season. My wife Donna and I are active in our church, First Baptist Church Huntsville, where we enjoy working with the youth.

Jessica Wallace, an ASRI employee and Marshall Star editor in the Office of Strategic Analysis and Communications, contributed to this article.

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

Pennsylvania House coffee table, Queen Ann, cherry with glass insert, paid \$500, asking \$175. 650-4806
Antique red oak Hoosier cabinet, refinished, enamel top, \$200. (931) 438-2625
Sheltie pups, CKC, born May 16, parents on premises, shots, wormed, \$350. 931-4270
Trumpet, \$400. 509-0256
Three-shelf painted bookcase, 3 1/2 feet by 4 feet, \$50. 882-1067
Alto saxophone, \$400; go-cart, \$100. 776-9165
Englander pillow-top mattress, full, box springs, \$50; dorm refrigerator, \$100; dorm microwave, \$50. 830-2806
Student desk, detachable desktop shelves, keyboard drawer, \$25. 656-8601
Two lawn mowers, \$20 each. 508-9552
Gift certificate, \$100, White's Refrigeration and A/C Service, expires Oct. 1, \$75. 895-6722
1870s Victorian server, mahogany; 1860s Eastlake table, oak. 852-1726
Four-piece wicker set, chair, rocker, side table, love seat, \$100. 837-2223
Yamaha YAS-23 saxophone starter horn, case, mouthpiece, \$700. (931) 433-0975 or (931) 993-8338
Red Japanese Fender Stratocaster, case, \$450. 233-5247
Yamaha Handmade Acoustic Guitar LS400, deluxe Yamaha hard case, tuner, songbooks, \$375 obo. 895-9593
Celebrity Fit Club Boot Camp DVD, Biggest Loser DVD, \$6

each, \$10 both. 337-1868
Hotpoint refrigerator, no frost, white, \$350; Estate by Whirlpool washer, dryer, \$475 both. (865) 384-4610
Four cemetery plots, Tri-Cities Memorial, Florence, Ala., \$4,000. 436-1106
Longaberger housekeeper basket, liner, protector, \$200 obo. 509-2536
Shutters, 15 inches by 71 inches, paintable vinyl panel, eight pairs, \$30 a pair. 503-6272
Britax car seat, 10-50 pounds, \$40; Vanguard traditional sofa, Damask-style fabric, loose-back cushions, \$200. 881-1763
Blue sectional sofa, \$200. 783-6278
Intex 18-by-48 frame pool, disassembled, \$250 obo; round leaf net, solar cover, \$35 each. 656-5703
White stove, over-the-range microwave, dishwasher. 859-9204
Sofa, chair, tan, micro fiber, www.myspace.com/ego6, \$250, \$300 delivered. 684-4883
Apple 12-inch Powerbook G4, 867MHz, 384MB RAM, 40GB HD, CD-RW/DVD-R, MAC OS 10.3.9. 348-1878
Shelby metal utility cart, 5-by-8, ramp, plank bed, 15-inch wheels, \$550. 431-8603
Current U.S.A. 30-inch compact fluorescent aquarium lighting. 698-1350
8-foot Kasson-Auburn pool table, fruitwood, Queen Anne feet, leather pockets, accessories, \$2,500. 880-6563
Upright piano, ebony finish, \$400. 665-6021
Sofa, \$150; desks, \$50, \$100; magazine table, \$15; artist books \$10, \$15; cookbooks, \$5, \$10. 527-6898
Crosley dryer, heavy-duty capacity, \$100. 837-0327
Buffet, floor lamps, make offer. 852-1726
Twin bed, white iron, heart-shaped headboard, footboard, mattress, box springs, \$100. 233-1487
Twin bed, white, mattress, box springs, \$50; bunk beds, ladder, \$40. 533-0099
Four Columbia T-shirts, large, new, \$50 for all. 772-1199
Golden Eagle compound bow, \$100; Takamine Jasmine six-string acoustic, \$50. 345-0852

Vehicles

2005 Chevy Colorado, four cylinder, auto, Viper keyless entry and alarm, \$13,500. 509-6573
2004 Nissan Pathfinder LE platinum, leather, dual power seats, Bose, sunroof, 40k miles, \$19,500. 429-8534

2004 R-Vision Class-A Motorhome, slide, workhorse chassis, extended warranty, www.thewilletfamily.com/rv, \$59,995. 883-7021
2003 Suzuki Intruder, 1500 LC, 43 mpg, silver/gray, saddle bags, 23k miles, \$6,200. 653-7946.
2001 Acura Integra GS-R, black, sunroof, five-speed, 102k miles, \$7,000. 325-2717
2001 Chevy Suburban LT, 2WD, leather, heated seats, towing package, 91k miles, \$12,500. 714-1941
2001 Lexus RX300 SUV, black, tan leather, sunroof, CD changer, 110k miles, \$13,700. 461-0096
2001 32-foot Winnebago Adventurer, slide, fully equipped, Michelin tires, warranty, 23k miles, \$59,000. 881-8970
2000 GMC Sonoma custom-designed work truck, 4x4, automatic, 90K miles, off-road skid plates, regular cab, green, \$8,000. (931) 967-7307
1999 Chevrolet Z71 extended cab truck, pewter, loaded, 178k miles, \$8,500. 347-5404
1998 Mercury Marquis LS, four-door sedan, leather, power seats, 32k miles, \$7,000 obo. 880-3254
1998 Chevy Blazer, V6 auto, new a/c, 135k miles, \$4,900. 479-1599
1997 Nissan Pathfinder, five speed, 2WD, CD, 160k miles, \$3,950. 430-6897
1993 Nissan Altima GLE, blue, new brakes, leather, \$1,495. 881-0888
1987 Chevy truck, 3/4 ton, 1993 350 engine, \$500. 753-2586
Yamaha gas golf cart, enclosure, \$1,250. 325-2919

Wanted

Two Tennessee Titans tickets, Redskins game, Aug. 11, other home game tickets. 797-7245
1977 or 1978 Trans Am, prefer black, consider others, good or excellent condition. 721-0917
Rain suit for motorcycle rider, size small or medium. 777-8229
Three-point hitch fence post driver to rent, part-time farmhand, New Hope area. 509-7907
Pine needles, will rake. 722-9535
Suspended ceiling parts, 24-inch cross-tees, older style for 25- to 40-year-old grid system. 233-0705

Found

Keys, blue bottle opener on key ring, Bldg. 4200, Post Office lobby. 544-4680

Focus on Marshall highlights History Office and new robotic weld tool for Ares I upper stage

By Lori Meggs

Where can you find information about topics ranging from the early years of Dr. Wernher von Braun and the development of the Saturn V to development of the space shuttle? Look no farther than the Marshall Center's History Office.

On the August episode of "Focus on Marshall," Marshall Historian Mike Wright reveals how researchers use historical materials to write books and papers and gain insight into the engineering work from Marshall's past. You'll also learn why having a repository for such

information is important to the future development of technology and aerospace design.

The episode also features a new capability being installed at the Marshall Center — the robotic weld tool — one of the largest friction stir weld tools in the world. You'll see how this unique tool will be used in the design and construction of the upper stage element of the Ares I launch vehicle.

You'll hear from Danny Davis, manager of the upper stage, about how the tool will be used on NASA's newest rockets, the cost-effective benefit of the addition to friction stir welding, and how his team is working closely with the Engineering Directorate on the manufacturing and assembly project.

"Focus on Marshall" airs on Marshall TV and on 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.

STS-118

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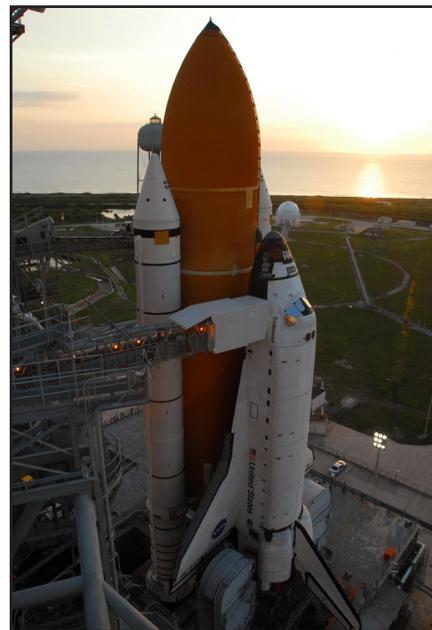
to add three more days to the mission, another spacewalk will be added.

Mission STS-118 will be the first for mission specialist Barbara Morgan, the teacher-turned-astronaut whose association with NASA began more than 20 years ago. First Lady Laura Bush called Morgan Tuesday morning to offer congratulations from "one schoolteacher to another," and to thank her for her commitment to the space program and to education.

STS-118 also marks the first time Endeavour has flown in more than four years. For more information, visit <http://www.nasa.gov/centers/kennedy/shuttleoperations/orbiters/endeavour-info.html>.

For more information about the STS-118 mission, visit http://www.nasa.gov/mission_pages/shuttle/main/index.html.

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



STS-118 ready for launch.

NASA

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