MARSHALL STAR

Marshall Space Flight Center — Nov. 16, 2000

'We bring people to space — We bring space to people'

Chandra team wins Air and Space Trophy

One of the Smithsonian Institution's most distinguished honors — the National Air and Space Museum's Trophy — has been awarded to the team responsible for the Chandra X-ray Observatory.

Established in 1985, the award recognizes outstanding achievement in scientific or technological endeavors relating to air and space.

Marshall Center Director Art Stephenson accepted the award on behalf of the Chandra team at a Nov. 9 ceremony at the Air and Space Museum in Washington, D.C. The team was recognized for its efforts in building, placing in orbit and operating the most sophisticated X-ray astronomical observatory ever built.

The Marshall Center manages the Chandra program for NASA.

Several organizations partner with NASA on the Chandra project. Flight operations, mission planning, data processing and user support are carried out at the Chandra X-ray Center at the Smithsonian Astrophysical Observatory in Cambridge, Mass.

Other partners include the Massachusetts Institute of Technology and the project's prime contractor, TRW.

For more information on NASA's Chandra X-ray Observatory, visit the Chandra Web sites at: http://chandra.harvard.edu and http://chandra.nasa.gov

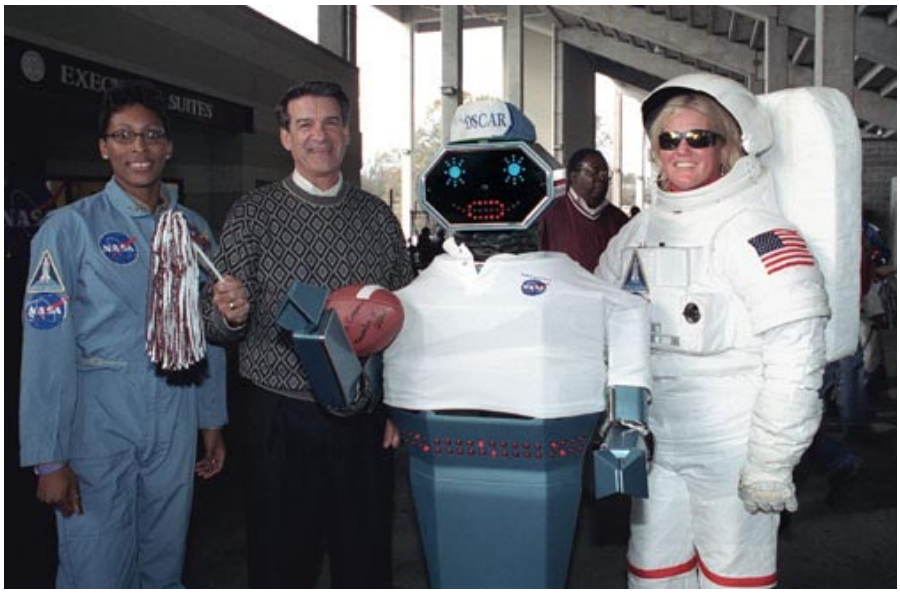


Photo by Emmett Given, NASA/Marshall Space Flight Center

Making quite a team

The Marshall Center and Alabama A&M University teamed up Saturday to show area high school students the opportunities offered through the two organizations. From left, Chanel Vaughan Leslie, employed by ASRI in Marshall's Equal Opportunity Office; Center Director Art Stephenson; Oscar the Robot; and Andrea Thompson of the Center Operations Directorate get ready for the football game. See story on page 2.

East Coast may offer best view of Leonids meteor shower

by Jonathan Baggs

Six teams of scientists led by the Marshall Center will monitor the annual Leonids meteor shower this month when the phenomenon is brightest over the North American continent.

Part of the monitoring activities will include the launch of a weather balloon carrying video and audio equipment which will allow scientists and the public to actually hear what a meteor sounds like as it crashes into Earth's atmosphere.

The public, particularly along the East Coast, also will be able to look up and, depending on weather conditions, see perhaps 700 or more shooting stars per hour.

Three peak times for the showers are forecast for the East Coast — Nov. 17 at about 3 a.m. EST and again at 11 p.m. EST, and Nov. 18 at about 3 a.m. EST — according to Bill Cooke, senior computer scientist at the Marshall Center.

A Leonids shower happens every year when Earth passes close to the orbit of the comet Tempel-Tuttle and the debris left in the comet's path. As Earth travels through the comet dust, the debris burns up in the Earth's atmosphere resulting in shooting stars or meteors. Some of these dust streams actually broke away from the comet long ago. Meteors visible this year date to 1932, 1866 and 1733.

"This year, the Moon will be in the constellation Leo — practically on top of

*See **Meteor Shower** on page 5*

Local high schools, universities to build, launch rockets with Marshall Center mentors

by Martin Burkey

Five Huntsville area high schools will field student teams that will build competing reusable rockets in the quest to launch a science payload — all under the guidance of NASA rocket scientists and engineers.

Sparkman High School, Johnson High School, New Century Technology High School, Randolph School and Madison Academy were selected after a competitive process by the Marshall Center. Following a design review next April, NASA will select one team's rocket to carry the science payload. Launch is planned for early next fall. The other schools will have an opportunity to launch their rockets at the same event.

Johnson, the only school to propose a science experiment to be flown on the reusable rocket, was selected to design and integrate its microgravity experiment for flight.

"This education initiative is intended to energize students through hands-on science, math and engineering," said Marshall Center Director Art Stephenson. "At the same time, this government-industry involvement with students helps develop and strengthen Marshall's future workforce — and our nation's future pool of talent."

A selection panel representing Marshall Center's major directorates originally planned to choose the best two proposals — one for a rocket and one for a payload — but found themselves equally impressed by the knowledge and professionalism of the student rocket scientists.

"We not only asked schools to submit written proposals, but we also asked them to give an oral briefing and answer questions from our selection panel, much like we do in the normal procurement process," said Jim Pruitt, manager of education programs at the Marshall Center. "We were so impressed with all the schools that we asked all five to design and build their rockets. If we can sustain this excitement and energize these students, maybe we can get some to go on and make a career of it."

A second rocket and payload will be designed, built and launched by area universities. The University of Alabama in Huntsville is leading the rocket team, and Alabama A&M University in Huntsville is leading the payload team.

The student reusable launch vehicle project is modeled after a similar program at Fredericksburg High School in Fredericksburg, Texas. In August, a student team successfully launched a 22-foot (6.7 meter) rocket to an altitude of 35,000 feet (10,668 meters).

"The Fredericksburg program demonstrates that not only can a project like this be done, it can be done safely and effectively," said Stephenson. "It shows that when students are given a chance to excel, they'll step up to the challenge — a trait we need in tomorrow's leaders. We want to provide more opportunities like that for today's young adults."

Potential launch sites are under review, and will be selected to meet the needs of the rocket designs.

The writer, employed by ASRI, supports the Media Relations Department.

High School Senior/NASA Day at Alabama A&M University

Approximately, 4,000 students attended High School Senior/NASA Day at Alabama A&M University in Normal Nov. 11 to hear about opportunities available to them through NASA and the university.

Marshall Center Director Art Stephenson spoke to students about the different opportunities that Alabama A&M and NASA can provide in their development as productive citizens. He also talked about the scientific relationship NASA has with the university.

More than 60 Marshall volunteers supported the event. They distributed CD-ROMs, lithographs and pamphlets about NASA and the Marshall Center and answered questions about ongoing projects. The Space Transportation Directorate provided models of the X-vehicles displayed at Louis Crews Stadium. Oscar the Robot interacted with the students at the football game.

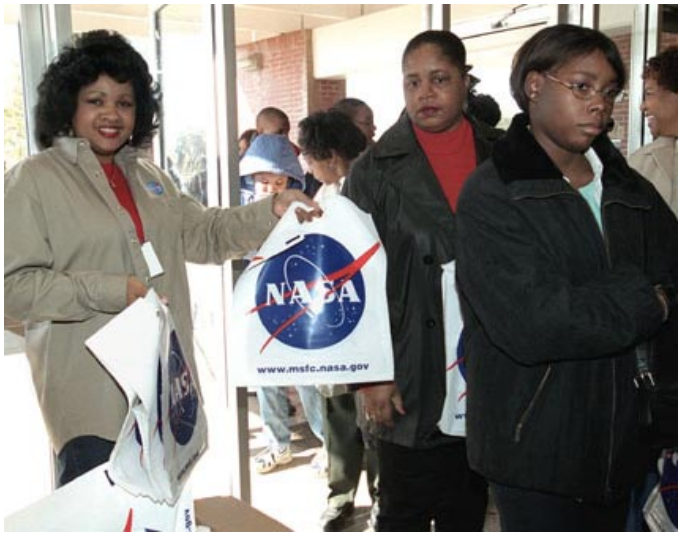


Photo by Emmett Given, NASA/Marshall Space Flight Center

Marshall volunteer Deborah Howard distributes career information to incoming high school students and their teachers.

Training for Space Station

International Training Control Board meeting this week in Huntsville

by Debra Valine

On Nov. 2, three humans opened the International Space Station for the first time. It took a lot of time — four years — to train them to perform various tasks on orbit, and the work of the International Training Control Board to ensure mission success.

The board — comprised of the international partners Russia, Canada, Japan and Europe; and representatives for the astronauts and cosmonauts, Italy and payloads — meets twice yearly to discuss program policies and processes regarding crew and flight controller training. The Marshall Center is hosting the fall board meeting this week through Friday at the Huntsville Hilton.

The Marshall Center is responsible for the science experiments — payload operations — training for the astronauts and cosmonauts, and for the training of the flight controllers at the Payload Operations Support Center.

"This group has been working Space Station for a long time," said Steve Noneman, of Marshall's Flight Projects Directorate. He sits on the board and chairs the payload training panel. "We have a keen interest in the Space Station because of the science we want to do on board."

The Expedition One crew aboard the Space Station — Bill Shepherd, Yuri Gidzenko and Sergei Krikalev — spent four years training for this first mission to inhabit the Station. But their training doesn't stop with the launch.

"Part of what we will be doing at our Huntsville board meeting is looking at how we will train the crew while it is on Station," Noneman said. "This is a new thing for us, so we will have to continue to train during the mission.

"We are very pleased that we successfully trained this group. Training took place over the past four years," Noneman said. "Some of the delays gave us additional time to train the astronauts and cosmonauts. Now we will begin training the subsequent crews."

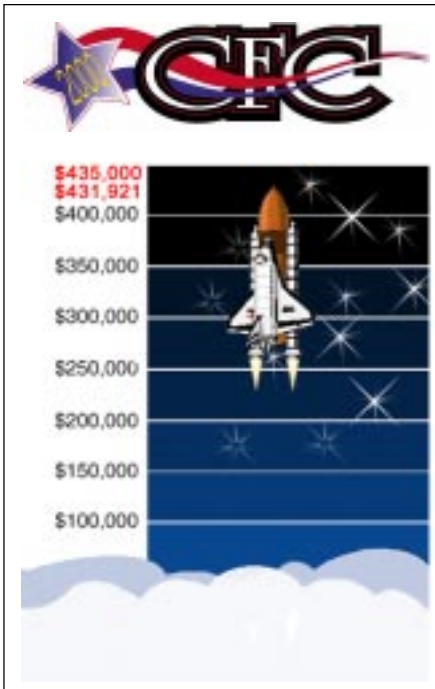
Having the first crew on Station is a real significant step, Noneman said. "But we have so much more to do."

The next challenge facing the board is training the crews to assemble the Space Station. "The equipment comes from all different countries and coordinating that is something we are working hard to make sure we do it well."

Getting this first crew to the Space Station presented its own training challenges. Since the launch was to take place in Khazakstan, the first crew trained in Russia for several months on Russian hardware that would get it to the Station. Also, the crew was trained on the Space Station hardware already on orbit and more being delivered during their flight.

"Next month the solar arrays on the Station will be deployed," Noneman said. "This will make the Station the third brightest spot in the sky — after the Moon and Venus."

The writer, employed by ASRI, is the Marshall Star editor.



Annual campaign nearing goal

As of Nov. 9, the following organizations have 100 percent participation in the Combined Federal Campaign: AD01, AD02, AD03, AD20, AD31, AD40, AD41, AD42, AD50, CD03, CD40, CD70, DE01, ED03, ED10, ED20, ED30, ED38, ED40, ED41, FD01, FD10, FD20, FD30, FD32, FD34, MP01, MP31, MP41, MP71, QS01, RS01, RS02, RS30, RS40, SD30, TD12, TD13, TD60, TD70, VS01, VS20 and WS01.

Overall, the Marshall Center has 64 percent participation for a total of $431,921.58. The Center's goal this year is $435,000. The campaign at Marshall ends Friday.

Marshall's Child Development Center renews USDA program

The Marshall Child Development Center is participating in the U.S. Department of Agriculture (USDA) Child Care Food Program.

Balanced and nutritious meals will be available at no separate charge to all enrolled persons at the center and will be provided without regard to race, color, national origin, age, sex or disability.

If you believe you or anyone has been discriminated against, write immediately to: Administrator, Food and Nutrition Service, 3101 Park Center Dr., Alexandria, Va., 22302.

For more information, contact the Marshall Child Development Center, Bldg. 4494, P.O. Box 9138, Marshall Space Flight Center, Ala., 35812, or call (256) 544-8609.

NASA publication spotlights Marshall Center technologies improving quality of life

New technologies developed at the Marshall Center are featured in the latest edition of "Spinoff" — an annual publication highlighting the successes of NASA's commercial partnerships with the business community.

"Spinoff 2000" explores 42 NASA technologies created for the space program then adapted for use commercially.

Spinoffs developed at or with the support of the Marshall Center include:

• Life-saving land mine deactivator that uses surplus rocket fuel to produce a special flare that safely burns up the explosive;

• Computer software that generates photos from video with the sharpness and clarity of a 35-millimeter camera photo;

• A quick-connect nut which locks securely with a single twist;

• A pump which heats liquids more efficiently using shock waves rather than electric heating elements or fossil fuels;

• Nozzles for spray coating of materials, providing more perfect applications.

U.S. patents owned by NASA are made available through licensing to industry in return for royalties paid to the inventors and their NASA Centers.

Since its founding in 1958, NASA technologies have enabled American industry to introduce more than 1,200 new or improved products, such as improved equipment for breast cancer detection, purifying water, and better, easy-to-use software for a variety of tasks.

"Spinoff 2000" can be viewed on the Web at: http://www.sti.nasa.gov/tto/online.html

For a great Safety Day

Photos by Dennis Olive, NASA/Marshall Space Flight Center

Above: Center Director Art Stephenson, center, presents Group Achievement Awards to Shelby Weathers, left, and Jody Singer, co-chairs of Safety Day 2000. Below: Stephenson, center, presents awards to Phil Robbins, left, chairman of Marshall's Safety Action Team, and Irene Taylor, chairwoman of the Safety Bowl.

Job Opportunities

Reassignment Bulletin 01-04-RE, AST, Technical Management, GS-801-13, Space Shuttle Projects Office, Space Shuttle Main Engine Project. Closes Nov. 22.

Reassignment Bulletin 01-05-CP, AST, Aerospace Flight Systems, GS-861-13, Science Directorate, Gravity Probe-B Office. Closes Nov. 22.

CPP 01-06-RE, Executive Support Assistant (O/A), GS-303-8, Engineering Directorate. Closes Nov. 27.

Reassignment Bulletin 01-06-JB, AST, Aerospace Flight Systems, GS-861-13, Space Transportation Directorate, Pathfinder Program Office. Closes Nov. 28.

"Safety First, The Rest is Just Details"
— Safety slogan submitted by
Gabe Nieto, MEVTEC

Sports

Tennis Results — The results from the Mars Tennis Club's End-of-the-Season Hi-Lo tournament are: first place — Tony Kim and Ronda Moyers; second place — Bob Goss and Joe Cremin; third place — Tom Sutherland and Glen Myers; and fourth place — Bill Boglio and Phil Hays.

Obituaries

Nicholson, Roger M., 72, of Huntsville, died Aug. 16. He retired from Marshall in 1994 where he worked as a program analyst. He is survived by his wife, Carolyn Nicholson.

Eddleman, Otis, N., 86, of Huntsville, died Sept. 27. He retired from Marshall in 1964 where he worked as an experimental metal fabricator.

Photo by Terry Leibold, NASA/Marshall Space Flight Center

Marshall salutes veterans

Marshall employees and family members participate in the Veterans Day Parade in Huntsville Nov. 11.

Meteor Shower

Continued from page 1

the Leonids radiant," said Mitzi Adams, a Marshall Center astronomer. "Moonlight will make fainter meteors hard to spot, but if there's a strong outburst, stargazers could see plenty of Leonids in spite of the bright Moon."

Because this year's peak meteor activity is not projected to reach storm level — at least 1,000 meteors per hour — Marshall scientists will use the opportunity to test their accuracy at predicting Leonids intensity.

In 1999, a true "storm" occurred when up to 3,700 meteors per hour were recorded over Israel.

"We can predict within minutes the time the meteors will peak," said Marshall Space Environment Team researcher Dr. Rob Suggs. "What we have trouble with is predicting the intensity."

If the intensity of a Leonids shower can be accurately predicted, scientists will know which way orbiting satellites should be turned to keep them operating smoothly during meteor activity.

"Satellites are an integral part of our lives now, so anything that affects these satellites directly affects our lives," Suggs said, citing as examples communications and television satellites.

To help protect these satellites from the fast-traveling meteors, Marshall scientists will analyze information from the various monitoring teams and pass it along to satellite operators.

Although a typical meteor is smaller than a grain of sand, it travels 12 miles (20 kilometers) per second. Leonids are the fastest of all meteors — traveling at about 44 miles (71 kilometers) per second. At that speed, a Leonids meteor could travel from New York to Los Angeles in about one minute.

Heavy Leonids meteor storms are predicted for 2001 and 2002.

"We are getting predictions from models for next year in excess of 10,000 meteors per hour over East Asia and Mongolia," Suggs said. "In 2002, predictions are in excess of 25,000 meteors per hour over the East Coast of the United States."

The Marshall Center is NASA's lead center for monitoring and forecasting meteor showers. Huntsville scientists will begin monitoring Nov. 16, using two image-intensified camera systems and recording the meteors onto videotape.

"This year we also have a forward-scatter radar that will allow us to 'hear' the meteors," Suggs said, explaining that the noises are caused by the meteors interacting with ionized gas or plasma in the Earth's atmosphere.

Besides monitoring the Leonids from Huntsville, Marshall scientists also will coordinate monitoring teams at the following locations:

- Mount Allison Observatory in New Brunswick, Canada.
- Elginfield Observatory at the University of Western Ontario, in London, Ontario.
- The University of Regina in Saskatchewan, Canada.
- U.S. Air Force LINEAR (Lincoln Near-Earth Asteroid Research) Observatory in Socorro, N.M.
- Calar Alto Observatory near Almeria, Spain.

In addition to the observing teams, Marshall scientists, weather permitting, will launch a 10-foot (3-meter) diameter weather balloon from Marshall's Atmospheric Research Facility at 12:30 a.m. CST on Nov. 18. The balloon will ascend approximately 20 miles (32 kilometers), carrying a sensitive camera for capturing high-resolution television pictures of the meteors. During the three- to four-hour flight, the television pictures can be viewed online at the Marshall Center's Science Directorate Web site at:
http://www.leonidslive.com

The balloon also will carry a very low frequency radio receiver that will allow visitors to the Web site to hear the "whistlers" and other bizarre noises that meteors might make as they enter the Earth's atmosphere. On-board transmitters will allow local amateur radio operators, or "hams," to track and retrieve the balloon.

The writer, employed by ASRI, supports the Media Relations Department.

SMO establishes consultant, mentoring program

Marshall's Systems Management Office has established a Project Management Mentoring Program comprised of a small team of eminent project managers who are available for consultation with Marshall's program and project managers on an as-requested basis.

This one-on-one, confidential consultation is provided as a service to the projects.

Two members of this team are now on contract. Emery Reeves, retired TRW vice president for special projects, has an extensive management background and has served in professorships at Stanford University in Calif., and the Air Force Academy in Colorado Springs, Colo. Fred Wojtalik, a retired Marshall manager, also has recently joined this team. During his career, Wojtalik served in multiple senior institutional and project management positions, culminating as the Chandra X-ray Observatory program manager.

The Systems Management Office plans to increase the team membership as needed and augment the team membership with additional eminent systems engineers available for consultation with program and project managers and systems engineers.

The mentors' availability is worked through the Systems Management Office, with calendars maintained by Ann Pigg at 544-0570.

Mentor visits to the Center are announced through e-mail and in executive staff meetings.

HOSC wins 'People's Choice' Award at Chili Challenge

The second annual Flight Projects Directorate Chili Challenge, with a costume contest, was held in the picnic area Oct. 31. The Chili Challenge — initiated in 1999 as a team building exercise — was such a success it was repeated this year.

Teams of civil servants and contractors create a theme for the decoration of their booths. Judges from outside the Flight Projects Directorate determine "Best Overall Booth," "Most Creative" and "Best Chili." The "People's Choice" award is voted on by all attendees at one penny per vote.

Booth No. 3 from the Huntsville Operations Support Center (HOSC) won this year's People's Choice Award. The award — $268.29 — was donated to Christmas Angels.

Other winners: Booth No. 1, Lockheed Martin, won $50 for Best Overall Booth; Booth No. 5, FD32, received a framed certificate for Most Creative; and Booth No. 3, HOSC, received a framed certificate for Best Chili. Costume contest winners were: first place — Egyptians in Booth No. 6, FD33; second place — Jan Davis and Axel Roth; and third place — Gypsies, Booth No. 1, Lockheed Martin from Trade Zone.

Photo by Doug Stoffer, NASA Marshall Space Flight Center

A Lockheed-Martin group, dressed as belly dancers.

Nunes elected American Welding Society fellow

Dr. Arthur Nunes, an engineer in Marshall's Materials, Processes and Manufacturing Department, has been elected to the 2001 class of American Welding Society Fellows for his contributions to the welding industry.

Nunes

He is one of five people to receive this year's honor and the first ever from NASA. The induction will be May 6 at the society's annual meeting in Cleveland.

Nunes has expertise in a broad range of welding methods and alloys. He has developed theoretical models for variable polarity plasma arc, gas tungsten arc, electron beam, laser beam, and friction stir welding techniques for materials ranging from nickel-based Inconel 718 to aluminum and aluminum-lithium alloys. His analyses have been used to improve the welding processes for the Space Shuttle External Tank and help eliminate heat affected zone cracking in Space Shuttle Main Engine parts.

The 22-year Marshall veteran holds bachelor's, master's and professional degrees in mechanical engineering from The Massachusetts Institute of Technology in Cambridge, and a doctorate in materials science from University of California-Berkeley. He also studied the history of welding for a year on a postdoctoral fellowship at the Smithsonian Institution.

Nunes has authored more than 30 papers and mentored 16 professors through the Summer Faculty Fellowship Program at Marshall. Prior to his service with NASA, he taught mechanical engineering at the University of Houston in Texas.

Center Announcements

Blacks in Government
Blacks in Government will meet at 11:15 a.m. Nov. 21 in Bldg. 5308, room 8124, of the Sparkman Complex on Redstone Arsenal. For more information, call Jean H. Matlock at 851-6648.

Research Mentors
The Education Programs Department has scheduled a workshop Dec. 6 for current and prospective research mentors/advisers. The workshop will provide information about roles, responsibilities, policy changes, timelines and processes related to higher education programs. The workshop will discuss information related to the National Research Council Post-doctoral Program, Summer Faculty Fellowship Program, Graduate Student Research Program and the Summer Undergraduate Practical Experience in Research. For more information, call Pamala Heard at 544-0776. Register to attend online at: http://www1.msfc.nasa.gov/education/registration_form.html

Vibration Course
A short course on practical vibration and shock testing will be held Feb. 20-22 at Wyle Laboratories at 7800 Highway 20. The course will focus on basic understanding of vibration and shock, on dynamic measurements in field and test lab, and on vibration and shock testing, as well as on HALT, ESS and HASS (highly accelerated life testing, environmental stress screening and highly accelerated stress screening). For more information, call the Equipment Reliability Institute in Santa Barbara, Calif., at (805) 564-1260.

Nut Sale
The NASA Exchange holiday nut sale begins at 9 a.m. Nov. 17. Sales will be from 9 a.m.-4 p.m., Monday - Friday (excluding holidays) in the Marshall Activities Bldg. 4752 in racquetball court no. 2. For sale are cashews —16 oz. for $5.50; chocolate-covered pecans — 16 oz. for $7; English walnuts — 16 oz. for $3.75; hickory smoked almonds — 16 oz. for $3.75; honey roasted almonds — 16 oz. for $3.75; natural almonds — 16 oz. for $3.75; pecans — 16 oz. for $5.50; raw peanuts — 16 oz. for $2; and salted in shell natural pistachios — 16 oz. for $3.75.

Shuttle Buddies
The Shuttle Buddies will meet for breakfast at 9 a.m. Nov. 27 at Mullins Restaurant on Andrew Jackson Way. For more information, call Deemer Self at 881-7757 or Gail Wynn at 852-8189.

Barber Shop Closed
S&H Barber Shop in Bldg. 4203 will be closed Nov. 23 and 24 for Thanksgiving. Regular hours are 8 a.m.-4:45 p.m. Monday through Friday. For appointments, call 881-7932.

Girl Scout Cookies
The Girl Scouts of North Alabama are taking orders for Girl Scout cookies through Dec. 3 for cookies to be delivered Jan. 13-Feb. 17. Proceeds from the annual cookie sale are used by troops for activities they have planned and by the council to fund services and programs made available throughout the year to Girl Scouts in this area. Cookies are $3 per box. To locate at troop near you, call 1-800-410-8338.

Christmas Dinner Dance
The MARS Ballroom Dance Club will host the Christmas Dinner Dance from 6:30-11 p.m. Dec. 2 at the Von Braun Center. The semi-formal event will have a holiday buffet dinner and the Little Big Band will play ballroom dance music. Reservations for a table of eight can be made by calling Woody Bombara at 650-0200. Tickets are available for $25 per person, with a $5 discount for club members, until close of business Nov. 27, unless sold-out early. Tickets can be purchased from:
Linda Kinney at 544-0563 or in Bldg. 4203, room 3319; Bob Williams at 544-3998 or in Bldg. 4203, room 4319; Hugo Berry at 544-3525 or in Bldg. 4487, room A209A; Pat Sage at 544-5427 or in Bldg. 4610, room1021A; Tamara Landers at 544-6818 or in Bldg. 4612 or in room 2401; Ed Ogozalek at 837-1486; Palmer Herndon at 534-7408; or Joyce Davis at 880-2270.

2000 FEHB Health Season
The 2000 Federal Employees Health Benefits (FEHB) Open Season is Nov. 13 through Dec. 11.

Black History Month Volunteers
Volunteers are being accepted to chair or serve on various committees for the Year 2001 Black History Month activities. To volunteer, send an e-mail to james.bailey@msfc.nasa.gov or jackie.pates@msfc.nasa.gov
Volunteers will receive notification of meeting dates and times.

Cha-cha, Rumba Lessons
The MARS Ballroom Dance Club has scheduled cha-cha and rumba lessons on Mondays in November in the Parish Hall of St. Stephen's Episcopal Church at 8020 Whitesburg Dr. Beginner and intermediate classes will be from 7-8 p.m. and beginner classes from 8-9 p.m. at a cost of $6 per person per night. For more information, call Woody Bombara at 650-0200.

Photo Lab Retirees
Photo Lab retirees meet the first Tuesday each month. For more information, call 461-8181.

Alabama Renegades Football
The Alabama Renegades professional women's football team is joining forces with the U.S. Marine Corps' annual Toys for Tots campaign. Free tickets to the team's final game at 1:05 p.m. Dec. 2 at Discovery Middle School on Hughes Road in Madison are available from the NASA Exchange, Bldg. 4752. Attendees are asked to bring a new or slightly used toy to the game.

Employee Ads

Miscellaneous

★ Hickory chair Mountain Vernon tea table; Pennsylvania House dining set; Council Chippendale chair. 882-1097
★ Brass and glass kitchenette; table w/four cushioned chairs, $155. 533-2287
★ Rubber bed mat for S-10, $25; Ruger M96/.44 mag rifle, $300. 851-8085
★ Pink and white pageant dress, size 6, $20. 379-3546
★ Camper top for 97-01 Dodge Dakota pickup, amethyst, Leer signature series, options, $650. 534-9678
★ Walnut dining table w/leaf, old, 54"x40", dark finish, $600 obo. 883-5253
★ Go-kart, new, one-adult size, $800 or trade for laptop or computer CPU. 881-1823
★ 1997 Honda CR250, new sprockets, chains, clutch and handlebars, new top end, $2,600. 233-6203
★ Craftsman riding mower, 42", 14.4 HP, $165. 682-5181
★ Nordic Track classic pro skier, $350. 353-0933
★ Twin bed, mattress, box, headboard, frame, 2-years old, $225. 881-5088
★ Phonics Junior, complete set, $75. 776-9165
★ Propane heater, $150; Apple computer system w/printer, $250; turntable, $75; desk set, 3 piece, $50. 828-6213
★ Lifestyler treadmill, $110 obo. 533-0169
★ Fiberglass camper shell, extended height, truck cab boot, fits compact truck (swb), $200. 859-0729
★ Refrigerator, GE, 19 cu. ft., top freezer w/icemaker, 5 yrs. old, $225. 882-1833
★ Area rug, 100 percent Chinese Dynasty Heritage, 6.3x8.3, multi-colored w/light blue background, $75. 971-2773
★ Phantom II radar detector/scrambler, new in box, $275. 505-3077
★ AMD K7 700mhZ, 10GBHD, 64mb, 56kmodem, 50xcd, 15" monitor, 8mb video, $765. 851-0704/694-0708
★ Storage boxes, 100 each, file size, crystal size (foam & separators), many larger; two 35 gallon bags of bubble wrap, $25 for all. 533-5428
★ Tour Master Cortex motorcycle riding pants, XXL, $150. 882-2973
★ Boxer puppies, AKC champion bloodlines, males, fawn and dark brindle. 420-8101
★ 8' x 10' x 4' wood deck. Perfect for mobile home. You remove. $950. 883-5396.

Vehicles

★ 1990 Honda Accord LX, 4-door, taupe, high mileage, 5-speed, $2,500 obo. 852-6335
★ 1988 Nissan Maxima, 4-door, white w/tan interior, needs work, $800 obo. 256-586-2288
★ 1999 Geo Tracker, silver, 17K miles, all-power, cruise, a/c, alloy wheels, 4-wheel drive, $18,600. 355-6116
★ 1992 Isuzu Trooper LS, 5-speed, 4WD, one-owner, $7,000. 722-8583
★ 1988 SAAB 900S, needs transmission, good for parts, best offer. 851-2875
★ 1986 Honda Accord 1X, 4-door, bronze, runs good, $1,500 firm. 771-0201
★ 1985 Ford LTD, 200K+ miles, work needed, make offer; 1986 GMC S10, 4-cyl., auto, 130K miles, needs engine work, $1,200. 881-0310
★ 1997 Mustang GT convertible, white/white, leather, AT, full power, CD/cassette, $15,500 obo. 586-3800
★ 1996 Firebird, white, V-6, air, automatic, CD/equalizer, $5 down w/good credit. 256-586-4241
★ 2000 Ford Ranger XLT SuperCab, a/c, ps, step side, 8K miles, $16,200. 379-4980
★ 1993 Dodge Grand Caravan SE, one-owner, many new parts, service records available, $5,300 obo. 895-9520
★ 1997 Ford F-250 XLT, heavy-duty, 4x4, 40K miles, w/gooseneck and towing package, automatic, $15,900. 931-732-4742
★ 1991 Ford Ranger XLT, SuperCab, 3.0 V-6, 124K miles, air, new battery, 5-speed, $3,500. 729-8089
★ 1997 Mercury Tracer LS wagon, 4-door, 26K miles, automatic, keyless entry, PW, ABS, luggage rack, $10,000 obo. 883-9875
★ 1997 Ford Windstar minivan GL, sandstone, quad captain chairs, rear-air, roof rack, 70K miles, $11,850. 837-0714
★ 1990 Toyota pickup, new tires, 118K miles, $2,700. 881-9426
★ 2000 Toyota Sienna XLE, 12K miles, original owner. $25,450. 881-3680

Found

★ Prescription sunglasses, found outside east end of Bldg. 4201 on 11/6. 544-3962/Tom
★ Ladies earring near Bldg. 4200. Call 544-4758 to identify/claim
★ Gold bracelet in Bldg. 4610 East parking lot. Call 544-1143 to identify
★ Men's glasses. Call 544-5748 to identify/claim
★ Earrings in North parking lot of Bldg. 4203, Nov. 7. Call 544-3560 to identify

Lost

★ Ladies pearl brooch in Bldg. 4200 area, if found, return for reward. 544-1915

Wanted

★ Men's wet suit and dry suit, sized L to XL, for winter water sports. 971-1414
★ Solid wood dining table for two with chairs, need by 12/15. 658-7679

Thank You

I would like to thank everyone who has offered comfort to me since the death of my son, Andrew. Many have anonymously donated leave; your generous gifts have enabled me to take needed time that I otherwise would not have been able to. Thank you for your kind words, cards, flowers, gifts, food, prayers and continuous support. Please know that our hearts have been touched by your acts of kindness and are greatly appreciated by my family and me. With love, Mary Jane Marion, SD42.

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