MARSHALL STAR

Marshall Space Flight Center — June 17, 1999

"We bring people to space — We bring space to people"

Marshall leads selection team

NASA looks for new ways to harness Sun's energy

by Kelly McFalls

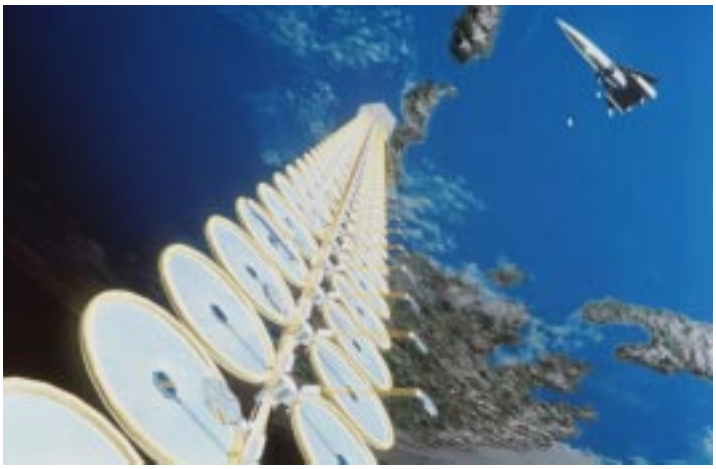
Marshall led a NASA team to select 23 proposals from organizations across the nation for negotiations leading to contract awards that could result in development of revolutionary space-based power generating systems to harness the Sun's energy.

Total value of the contracts is estimated at $6.4 million and work will begin immediately, assuming successful completion of negotiations.

NASA is seeking new concepts and technology demonstrators for commercially viable space solar power generation technologies that could provide energy for Earth and vehicles traveling in space.

"Ultimately, we'd like to put a 'power generation station' into space," said Axel Roth, head of the Flight Projects Directorate and selection team lead at Marshall. "The 'power station' would harness the Sun's energy for use on Earth and by spacecraft traveling through the solar system."

Selected to provide space solar power concepts are Auburn University; The Boeing Co.'s Phantom Works, Seattle; Essential Research Inc., Cleveland; ILC Dover Inc., Frederica, Del.; Lockheed Martin Astronautics, Denver; Rockwell Science Center, Thousand Oaks, Calif.; Sundstrand Aerospace, Rockford, Ill.; Texas Engineering Experiment Station at Texas A&M University, College Station; University of Illinois at Chicago; Boeing North American Inc., Downey, Calif.; Carnegie Mellon University, Pittsburgh; ENTECH Inc., Keller, Texas; Microwave Sciences Inc., Lafayette, Calif.; The Aerospace Corporation, Los Angeles; American Institute of Aeronautics and Astronautics, Reston, Va.; Futron Corp., Bethesda, Md.; Ohio Aerospace Institute, Cleveland; Science Applications International Corp., Houston; Space Frontier Foundation, Nyack, N.Y.; and Strategic Insight Ltd., Arlington, Va.



Imagine providing the Earth or a moon base with harnessed solar power, or traveling in space without returning to Earth for fuel. That's the idea behind space-based solar power generators such as this SunTower.

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

File photo

Joel Kearns demonstrates Marshall's KC-135, used to simulate the near-weightless environment of space.

Marshall bids farewell to Microgravity's Kearns

by Tracy McMahan

Today Marshall says farewell to Joel Kearns, who for four years has managed NASA's Microgravity Research Program and Space Products Development Program. He leaves Marshall to be director of Crystal Growing at Mitsubishi Silicon America in Salem, Ore. His successor as program manager will be named later.

During Kearns' tenure, the Microgravity Research Program has made significant strides in understanding basic physical

*See **Kearns** on page 6*

"Safety is a Frame of Mind"
— Safety slogan submitted by
M.F. Dodd, HEI

Milestones to Apollo 11

Editor's Note: *On July 16, 1969, three American astronauts lifted off on a journey to the Moon atop a Saturn V provided by the Marshall Center. Now, 30 years later, the Marshall Star is publishing some of its stories that led up to the launch of Apollo 11.*

A Marshall Star article on June 11, 1969, described testing under way on the Apollo/Saturn launch vehicle.

The Star reported that "Apollo 11 Astronauts Neil Armstrong, Michael Collins and Edwin Aldrin are working in mission simulators this week while the vehicle that will take them into space is put through a series of checks following a successful flight readiness test.

"The Apollo/Saturn V (AS-506) flight readiness test was completed at about 4:07 p.m. CDT Friday, June 6, with the third stage translunar injection burn. Simulated liftoff took place at 1:17 p.m. No major launch vehicle or spacecraft problems were noted during the test."

The towering 363-foot Saturn V was a multi-stage, multi-engine launch vehicle standing taller than the Statue of Liberty. Altogether the Saturn V engines produced as much power as 85 Hoover Dams.

File photo

Dr. Wernher von Braun pauses near the Saturn V rocket being readied for the historic Apollo 11 lunar landing mission.

Marshall's annual picnic, Apollo anniversary set July 17

The Marshall Center's annual picnic celebration will be held July 17 at the Marshall picnic grounds. The theme will focus on "Celebrating the Past…Creating the Future" in honor of the 30th anniversary of the Apollo landing.

Traditionally the picnic features a classic, antique and custom car show. Motorcycles have been added this year. To show a "bike" or car at the picnic, call Rich Wegrich at 544-2626. Airplanes also will be on display. To show an airplane, call Paul Johnson at 544-3793 to make the necessary arrangements. Prior permission is required from the military so call early.

One event unique to this year will link Marshall's observance of the 30th anniversary of the Apollo 11 mission with the picnic itself.

An easy-paced relay run will offer an opportunity for runners and joggers to participate in a symbolic "passing of the torch" from the Apollo era to today. The event — loosely patterned on the Atlanta Olympics Torch Relay — is intended as a combination of fun and symbolism: to convey the legacy established by Marshall's Apollo and Saturn team is alive and strong, and being carried into the future by members of today's "New Rocket Team."

Details about how to participate in the event — or show your support for those who do — will follow in a future Marshall Star.

NASA pledges funds to bring teachers to Space Camp

Demonstrating its ongoing commitment to excellence in education, NASA pledged $70,000 to the U.S. Space & Rocket Center for its annual International Space Camp program July 31-Aug. 6 in Huntsville.

Each year International Space Camp plays host to the nation's finest educators — the U.S. Teachers of the Year. They are joined by outstanding educators from 30 countries for a week of space science education, teacher enrichment activities and professional collaboration.

"We are very grateful that NASA has once again elected to support International Space Camp," said Mike Wing, president and chief executive officer of the Space & Rocket Center. "This unique educational program crosses cultural and ethnic boundaries, promoting cooperation and unity among nations — an endeavor shared by NASA."

NASA is a long-time supporter of the Space & Rocket Center and U.S. Space Camp programs. "We believe that NASA's investment in education is indeed an investment in America's future," said Jim Pruitt, manager of Marshall's Education Programs Department. "NASA is about inspiration, real science and learning by doing. It's important for educators to have access to the science and technology generated by our nation's space program."

The funds will cover transportation, food, lodging and Space Camp tuition.

Michele Miller named new NASA Exchange manager

by Debra Valine

Anyone who's been around Marshall for very long knows NASA Exchange Manager Carol Wasserman and that she is retiring Thursday. Michele Miller, recently of Slidell, La., is the new manager of the NASA Exchange.

"You cannot talk about NASA Exchange without talking about Carol Wasserman," Miller said. "For the past 30 years, Carol has grown the office from one person to the structure you have today. She has set a very high benchmark for me to follow."

Miller, who brings years of marketing and finance experience to the Exchange, said she feels fortunate to come into a position where everyone already works so well as a team. Fitness services provided at the fitness center are unsurpassed in the community, she said.

"Our services are free to any NASA employee and the fee for dependents is less than any fitness center in Huntsville," she said. Miller invites NASA employees or anyone who interacts with the Exchange to visit the facility.

"Our performance is based on the service we provide to the customer," she said. "Over the next couple of months NASA employees will be asked to respond to several surveys that include questions ranging from what do they want available in the vending machines and what new clubs and organizations would they like to have, to growing the retail store.

"We want to know our customers' preferences and make appropriate adjustments. For me, it is really pretty simple. My goal is to exceed customer expectations. I think that is achievable."

Photo by Terry Leibold

Michele Miller, new manager of the NASA Exchange, hopes to increase the Exchange's retail business.

Miller holds degrees in marketing and finance, has owned a retail clothing store, has worked as an accountant, and was an administrator for Slidell Hospital.

Miller is married to Lon Miller, the vice president and deputy general manager of Sverdrup Technology Inc., which is what brought the family to Huntsville. They have a 20-year-old daughter, Kelly, who recently transferred from Louisiana State University to Auburn University, where she studies biochemical engineering.

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

Photo by Doug Stoffer

If you push this button ...

From left, Leslie Curtis, Propulsive Small Expendable Deployer System (PROSEDS) project manager; Hazel Richardson, Madison County High School media specialist; and Charlotte Shelton, Liberty Middle School science teacher for Madison County Schools, listen to Bruce McCoy, a test specialist with the Engineering Directorate. McCoy explains PROSEDS hardware to the Hands-On Work Experience teachers for local middle and high school teachers during their visit to Marshall June 11.

Marshall physicist realizes her dreams, discovering two new stars with space-based observatory

by Tracy McMahan

As a child, Marshall astrophysicist Dr. Colleen Wilson-Hodge and her father observed craters on the Moon with a small telescope. Now, using one of NASA's most powerful telescopes, she has been able to look at the outer reaches of the universe and has discovered two new, exotic stars called X-ray pulsars.

"I've always wanted to be an astronomer," said Wilson-Hodge, who has worked at Marshall for 10 years while earning undergraduate and doctorate degrees.

Wilson-Hodge's parents encouraged her to pursue her dreams.

"They always told me I could do anything and it didn't matter that there weren't many women in the career I dreamed of pursuing," she said.

Wilson-Hodge is a member of the instrument team for the Burst and Transient Source Experiment on NASA's orbiting Compton Gamma Ray Observatory. The 34-member team includes five women — three with doctorate degrees and two with undergraduate degrees — all working in the field of high-energy astrophysics. Other women work on the project as computer scientists, engineers and in educational outreach.

The team's make-up reflects surveys by the American Astronomical Society that indicate more young women are becoming astronomers. The society's data show that approximately one in three young astronomers are women and about 20 percent of doctorate degrees in astronomy and physics are awarded to women.

Wilson-Hodge became intrigued by the world of high-energy astrophysics because of the example of Dr. Gerald Fishman, the principal investigator at Marshall for the Burst and Transient Source Experiment. Fishman's excitement about the Gamma Ray Observatory and its ability to reveal a view of the universe never seen before proved contagious.

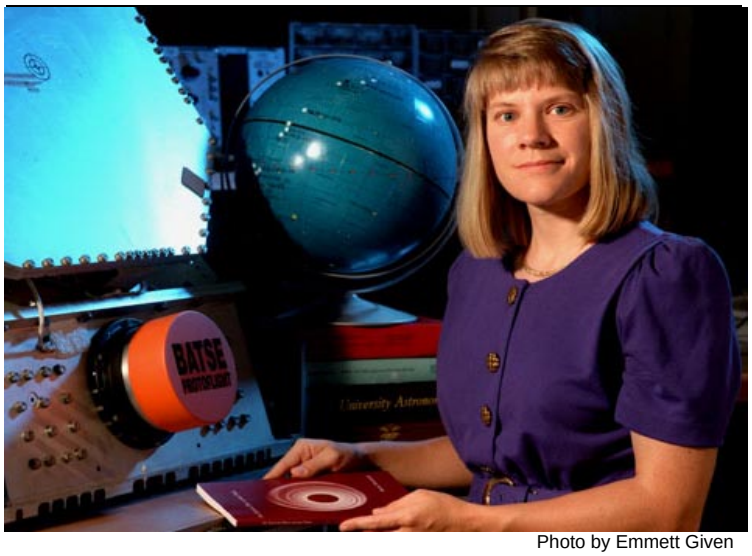


Photo by Emmett Given

Marshall gamma ray astrophysicist Colleen Wilson-Hodge discovered two new stars using the Burst and Transient Source Experiment.

Like Fishman, Wilson-Hodge hopes to become a science team leader and design a new instrument capable of detecting even more of the invisible universe. "Gamma-ray astronomy is opening up a whole new frontier of research," she said. "I decided to become a gamma-ray astronomer because there was more potential for discovering something new. Pulsars were particularly fascinating because they were bizarre, mysterious stars and not much was known about them."

A pulsar is a rotating neutron star formed when a large, ordinary star explodes as a supernova and then collapses. A neutron star is very small and dense but has a tremendously strong magnetic and gravitational field. Wilson-Hodge discovered a particular type of pulsar called an X-ray pulsar. Unlike radio pulsars, which are powered by rotation and emit radio waves as they spin slower and slower, X-ray pulsars emit X-rays and gamma-rays and are powered by accretion — gobbling up material from a companion star.

"Discovering a new pulsar is very exciting. When I was a kid, I imagined a job at NASA would be like this. For just a little while, the universe is putting on a show that only I — and members of the gamma-ray team — know about."

Both pulsars discovered by Wilson-Hodge do appear to be devouring material ejected by superhot, blue-white stars that emit visible light and are eight to 15 times more massive than our Sun. As these X-ray pulsars orbit another star, their strong gravity pulls the matter toward their surfaces.

"We get a giant outburst from matter being dumped onto the surface of the pulsar," said Wilson-Hodge. This outburst is accompanied by increases in X-ray and gamma-ray emissions that help astronomers discover new stars not visible to the naked eye.

"When I think there is a new source in the Burst and Transient Source Experiment data, I can't wait to get to work to see what the source will do next," she said. "I'm like a kid waiting to open a Christmas present."

Her most recent pulsar discovery came Sept. 7, 1998. It has two names — XTE J1946+274 and GRO J1944+26 — because both the Compton Gamma Ray Observatory and the Rossi X-Ray Timing Explorer captured its signal. "My first pulsar discovery was the most exciting," conceded Wilson-Hodge of her 1995 discovery of GRO J2058+42. "At the time I found it, I knew we were the first to see it. It is thrilling to study something no one has ever seen before."

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

Marshall's Savings Bond Campaign under way

by Debra Valine

Now that the reorganization is over and people are settling back into a routine, people may want to start thinking about investments.

One safe, easy way to invest is U.S. Savings Bonds. While Marshall employees can sign up to purchase savings bonds through payroll deduction anytime, the period between May 20 and June 30 has been set aside for the annual Savings Bond Campaign.

"New this year is the I Bond," said Edwina Bressette, Marshall's bond coordinator. The new I Bonds pay a higher interest rate than the Series EE bonds and can be purchased in denominations from $50 to $30,000. They are exempt from state and local taxes, and federal tax on the investment can be deferred for up to 30 years, she said.

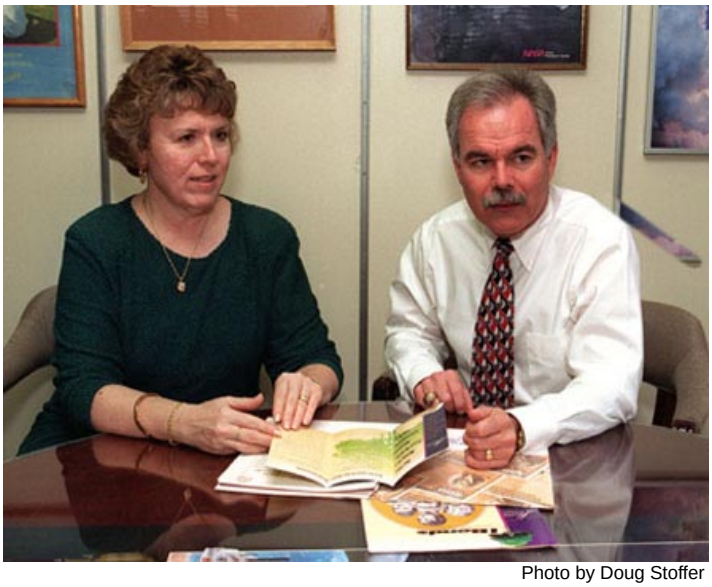


Photo by Doug Stoffer

Edwina Bressette, left, Marshall's Savings Bond coordinator, reviews campaign literature with Danny Hightower, manager of the Human Resources Department and 1999 chairman of the Greater Huntsville Savings Bond Campaign.

"The I Bond is not available through payroll deduction," Bressette said, "but will be next year. However, you can buy I Bonds at the bank." The I Bond pays 5.05 percent interest. Series EE Bonds pay 4.31 percent.

"Savings bonds are a secure, painless way to invest," said Danny Hightower, manager of Marshall's Human Resources Department and chairman of the 1999 Greater Huntsville Savings Bond Campaign. "The guaranteed interest rate on I Bonds is 3.3 percent above the current inflation rate.

"Savings bonds make great gifts," Hightower said. "I would guess that many of our employees still remember that savings bond that they received for graduation. They are also a great way to save for a child's education."

"The interest on the bonds is tax-free if you use the money for education, " Bressette said.

Savings bonds are a market-based investment. They also are a liquid long-term investment — they can be cashed anytime after six months. "Buying bonds is still good for America," Hightower said.

To enroll in the savings bonds payroll deduction program, civil service employees can see Bressette or their payroll officer. More information about bonds is available on the Web at: www.savingsbonds.gov

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

Saturn V exhibit groundbreaking

Six former Marshall employees from the Apollo/Saturn V days join Center Director Art Stephenson and U.S. Space & Rocket Center Chief Executive Officer Mike Wing at a groundbreaking ceremony recently for the Saturn V exhibit under construction at the Space Center. From left are Walter Haeussermann; Werner Dahm; Dieter Grau; Stephenson; Wing; Hans Fichtner; Walter Jacobi; and Konrad Dannenberg.

Photo by Doug Stoffer

NASA selects SHARP PLUS student apprentices for 1999

High school students will live on college campuses and conduct science research at 15 universities this summer through NASA's 1999 Summer High School Apprenticeship Research Program (SHARP PLUS).

NASA and the Quality Education for Minorities network have selected 300 high school students from 1,200 applicants to participate in this year's program. These apprentices represent 195 high schools and come from 34 states, the District of Columbia, Puerto Rico, Guam and the U.S. Virgin Islands.

Over the past six years, the SHARP PLUS program has provided almost 1,500 summer research apprenticeships to high school juniors and seniors interested in mathematics, science, engineering and technology. The June 14 through August 8 program will enable students, under the guidance of industry and university mentors, to reside on university campuses around the country.

The list of high school students, their home states and the participating universities is available on the Internet at: ftp://ftp.hq.nasa.gov/pub/pao/pressrel/1999/99-069a.txt

Kearns

Continued from page 1

processes by studying them in the near-weightless environment of space.

Experiments conducted in the microgravity environment of space allow scientists to delve into processes that are hidden or impossible to study in Earth's gravity. Understanding these processes is expected to provide insights that will help improve medicines to treat life-threatening diseases; make stronger metals and alloys needed for airplanes or automobiles; and improve components used in computers and electronics.

Since Kearns began his NASA career in 1988 as manager of Microgravity Materials Science and Biotechnology programs at NASA Headquarters, 400 scientific and commercial microgravity experiments have flown in space.

"I was particularly proud of the NASA/industry team for turning around the First Microgravity Sciences Laboratory mission in 1997 and reflying the 36 experiments within three months after the first flight," Kearns said.

"That was the shortest time period a payload had ever been flown, returned to Earth and reflown again on the Shuttle. It took a lot of hard work by people at all the NASA Centers to make that happen."

Kearns praised the results of microgravity research — from protein crystal growth managed at Marshall to research on combustion done for the first time in microgravity and managed by NASA's Glenn Research Center in Cleveland. He also cited as groundbreaking experiments the studies of dendrite crystals — tree-branch-like crystals that determine the strength of metals and alloys — and with semiconductor crystals.

"Basic and applied scientific research is the foundation of America's high-technology economy," Kearns said. "The results already gained from missions in space make it clear that space research can provide unique and valuable knowledge for America."

Kearns said protein crystal growth experiments performed on the Space Shuttle and Russia's Mir space station have not only helped researchers determine the structures of key proteins used to design new drugs, but more importantly, helped them learn how to grow crystals in both microgravity and on Earth.

"Researchers were able to make a major breakthrough on Mir," Kearns said. "Studies were done to explain exactly what physical mechanism is leading to better crystals from space. In addition, researchers demonstrated that using long-duration microgravity, crystals could be grown that are phenomenally bigger than those grown on Earth, opening the door to improved ground-based analysis of those crystals."

Mir was a great dry run for the International Space Station and has helped microgravity researchers as they plan research for the Space Station, he added.

In addition to protein crystal growth, 20 experiments were flown on Mir that allowed investigators to learn how to grow cells and tissues in space — research important to understanding how healthy and cancerous cells reproduce. Other experiments on Mir ranged from testing theories in materials science to earthquake engineering.

Although hundreds of experiments have been completed in the past 15 years, most only got a few hours of experiment time in an orbital laboratory, Kearns said. The Space Station will change that, he said, giving investigators the time they need to do research over a long period of time — the way research is carried out in Earth-based labs. Microgravity experiments are scheduled to begin aboard the Space Station in 2000.

"I am proud of the job Marshall has done as the Lead Center for these programs," Kearns said. "We manage work across the agency and have established good working relationships with other NASA Centers." Under Kearns' leadership, new partnerships have also been forged with industry, more commercial partners are working with the NASA Commercial Space Centers and new Commercial Space Centers are being opened.

Kearns started working in the field of microgravity science more than 15 years ago as a student working on experiments in crystal growth and fluid physics that were eventually flown on the Space Shuttle.

He doesn't plan to forget about the world of microgravity. "I'll be keeping a close eye on what's happening in microgravity research," Kearns said.

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

Internet delivery services team provides Web support

"Build it and they will come" is an old adage that embodies the principles of the Internet Delivery Services (IDS) team.

The NASA Information Systems Services Office (ISSO), along with Computer Sciences Corp. (CSC), believes that by building a coherent, consistent, cost-effective Website with cutting-edge services, customers will be satisfied and clients will come.

As a part of the Center Operations Directorate, Justin Jackson of ISSO is partnered with the CSC team, led by D. Alan Cunningham, forming an alliance to provide Internet delivery and hosting services at Marshall.

Since it began operations in 1995 — including the Marshall Homepage and "Inside Marshall" — the team has successfully generated and maintained more than 75 Internet sites, and continues to set standards within the NASA Internet delivery community.

The Web team is responsible for designing, developing and delivering dependable, high-quality Internet services for many elements of NASA.

The team combines disciplines from systems engineering, education, software development, marketing and customer service to effectively deliver products and services to meet customer requirements.

Maintaining a thorough understanding of industry trends and technical innovation, the Internet Delivery Services team provides consultation services and assistance to customers on information delivery via the Internet. These services also include design services where prototypes are built to offer fresh, innovative approaches to Internet delivery.

ISSO/IDS also provides Internet presence design services by installing and integrating compatible versions of Internet server software products, providing data structures on a shared Internet server for a new Internet presence, and providing data storage, security and capacity planning.

The Web team also is actively involved in emerging NASA and Marshall Web standards to ensure Website compliance.

ISSO/IDS is a one-stop service for custom Web page coding needs. The team believes Internet Services is not just a sideline, it's a profession. Visit the IDST Website at:
http://www1.msfc.nasa.gov/IDST

Photo by Doug Stoffer

The Internet Delivery Services team includes, from left: bottom row, Alan Cunningham and Mike Jacoby; second row, Gary Rhoney, Stacey Haddock, Charlotte Teague and Kathy Forsythe; third row, Jeff Cobb, Jeannine Norman, Lisa Nayman, Linda King and Ken Mitchell; fourth row, Charmein Johnson, Pam Gentle, Justin Jackson (ISSO partner), Mada Ritter and Rick Serwecki. Not pictured are Heather Deiss and Randy Jordan.

Information technology security: Guard laptop computers against theft

As technology continues to evolve at a breakneck pace, computers are becoming cheaper, smaller and more powerful, giving Marshall travelers the same productivity on the road as in the office.

Today's laptop computers boast processors as fast as 300 megahertz and can weigh as little as 3 to 4 pounds. Unfortunately, the very traits that make these machines desirable for Marshall travelers also makes them exceptionally attractive to criminals.

Many laptop users regard their computers as just another tool, and sometimes fail to take adequate measures to safeguard these valuable machines. These habits provide criminals with a high-yield, low-risk income potential.

The average laptop system generally costs between $2,000 and $4,000, and nets between $500 and $800 on the black market. The FBI reports that 97 percent of stolen computers are never recovered. Laptops often contain a wealth of sensitive technical or business information, with grave impact to the owner if stolen and misused.

While laptop theft represents one of the costliest areas of computer crime, it is also one of the most easily prevented.

Exercise vigilance when traveling, especially through airports and hotels. Avoid obvious laptop bags which advertise your computer to potential thieves. Secure your computer when unattended, and protect the critical information on your portable system through data backup and encryption.

For additional information on this and other related information technology security issues, call Steve Jones, Marshall's information technology security coordinator at 544-4373.

Employee Ads

Miscellaneous

★ Schwinn Highplains bicycle, Shimano gears and brakes, $150; cooktop w/grill insert, 21"x36", $50. 882-0546
★ Girl's 16" single-speed bicycle, $25. 882-1566
★ Whirlpool window air conditioner with thermostat control, 21,000 BTU, 220V. 880-6335
★ Solid cherry Chippendale glass-top coffee table, $150. 464-5774
★ Delta locking truck tool box for small pick-up, $75. 883-7695
★ Small gun safe, $60; Homelite gas blower, $40; air-compressor, 3/4HP, $115; Craftsman table-top saw, 8", $75. 830-4846
★ Lawn tractor, 12.5HP, Lowe, grass catcher, $300; Ashley wood fireplace insert w/blower, $300. 729-8020
★ Piano, $175 obo; two electric attic vents, new, $25 each. 837-9338
★ Stationary bike, dual-action air cycle, $50. 539-0263
★ Queen bed, w/o mattress, dresser, mirror, $300; twin beds, w/o mattress, $200; refrigerator, $200. 650-0959
★ Maxtor 5.7GB hard drive, refurbished by factory, $100. 828-2832
★ Sears dryer, $100; six-leg children's swing set, $100; large microwave oven, $55; pet cage, $25. 881-6040
★ Road bicycle, mostly Campy equipped. 880-2761
★ Computer desk, 6', $150; Broyhill sleeper sofa/matching love seat, hunter green/burgundy, $400. 883-0057
★ Piano, Baldwin, cherry, console, $1,500. 882-1097

Vehicles

★ 1988 Nissan Sentra, automatic, air, 119K miles, $1,800. 461-8314
★ 1995 Nissan truck Kingcab SE, 4x4, must sell, $11,900. 512-9966
★ 1993 Chevy Silverado, 5.7L, auto,pw/pdl/ac, bedliner, matching camper shell, 53K miles, $10,900. 830-6584
★ 1985 Nissan Stanza, one owner, maintenance records, pw/pdl, 5-speed, $1,250. 230-6846
★ 1997 Mitsubishi Eclipse GS, black, sunroof, leather, keyless entry, airbags, alloy wheels, 6CD changer, 45K miles, $15,200. 990-2050
★ 1977-1/2 Porsche 924, silver, 4-speed, sunroof, 135K miles, $2,100 obo. 828-6213
★ 1995 Chrysler New Yorker, 66K miles, burgundy w/gray interior, Infinity stereo, alloy wheels, $8,200. 880-9025
★ 1989 Buick Riviera, 2-door standard coupe, 6 cyl., leather power seats, 67K miles, $5,900. 881-8877
★ 1998 Honda CRV EX, 5-speed, 4WD, black, CD player, 18K miles, $19,000. 828-6247
★ 1969 Plymouth Valiant, Auto8, 74K miles, $2,750; MTX Blue Thunder, speaker/amp, $450. 881-8026

Found

★ Men's glasses w/black case on sidewalk, south parking lot, Bldg. 4203. Claim at Bldg. 4203, room 3104.
★ CD in parking lot of Bldg. 4201. Call and identify. 544-0541
★ Gym bag in lobby of Bldg. 4203. Call 544-4758 to identify.
★ Eye glasses in picnic area. Call 544-4758 to identify.
★ Silver hoop, clip-on earring in parking lot southside of Bldg. 4200. Call 544-0514.

Lost

★ Eye glasses outside of Bldg. 4200. Call 544-4758 if found.
★ Dogwood or magnolia bloom pin at Bldg. 4200. Call 544-4758 if found.
★ RayBan sunglasses in vicinity of Sparkman Center auditorium on June 11. 544-1312

Center Announcements

☞ ***Potable Water Outage*** **—** There will be a potable (drinking) water outage from 7 a.m., July 3 to 6 p.m. July 5, for the following buildings and areas: NASA Sewage Plant, 4762, 4200 area (all buildings), 4614, 4628, 4607, 4612, 4605, 4194, 4187, Airfield (4800 area), 4424, 4700 area (all buildings including the Marshall Activities Building 4752), 4643, 4622/23, 4610, 4619, 4611, 4191 and 4189. The Army is installing valves at or around water tanks to improve water system efficiency. No test area buildings are affected by this outage nor is Bldg. 4663. Buildings not on the list probably will not be affected. For more information, call Cleve Nilsen at 544-8081.

☞ ***National Men's Health Week*** **—** This is National Men's Health Week. The purpose is to raise awareness of the importance of preventive health behavior in early detection and treatment of health problems affecting men. For more information, visit the following URL address: http://www.fathersworld.com/mh_week

☞ ***Marshall Association Luncheon*** **—** The Marshall Association will meet Monday at 11:30 a.m. at Marshall's West Picnic Pavilion. Center Director Art Stephenson will speak. Cost is $5 for New Orleans-style jambalaya, desserts and sodas. Make reservations by e-mailing Efrem J. Hanson at: efrem.hanson@msfc.nasa.gov or Dave Carstens at: dave.carstens@msfc.nasa.gov

☞ ***TMA Scholarships*** **—** The Marshall Association is offering two scholarships to dependents of Marshall employees who are high school graduates entering a college or university in the fall as freshmen. The value of the scholarships will be at least $1,000 each. One scholarship will be for a student studying science, engineering or mathematics. The other will be for a student studying business, teaching, arts, etc. An application form is posted on "Inside Marshall." To apply, download and complete the form, and send to Axel Roth, FD01, Bldg. 4203, room 3414. Application deadline is July 9.

☞ ***Shuttle Buddies Breakfast*** **—** The Shuttle Buddies will meet for breakfast at 9 a.m. Monday, June 28, at Shoney's on University Drive West. For more information, call Deemer Self at 881-7757, or Gail Wynn at 852-8189.

☞ ***Information Technology Training*** **—** An information technology security employee basic awareness briefing for Marshall civil service and contractor supervisors will be June 24 from 9-10 a.m. in Morris Auditorium. This is required training. Copies of the training CD-ROM used in the briefing will be distributed to supervisors attending the training to train their workgroups and report employee participation for documentation of the FY '99 training. For more information, call Steve Jones at 544-4373.

☞ ***MOO Retirees Meet*** **—** The Management Operations Office (MOO) retirees will meet for breakfast/lunch June 24 at 10 a.m. at the Cracker Barrel in Madison. All present or former MOO employees are welcome. For more information, call 539-0042.

SES Job Opportunity

MSFC ES-10-99, Manager, Subsystems and Components Development Department. Closes July 9.

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