April 26 may have been just the start of another week for most people, but for two little girls, it was a red-letter day as they got a chance to do something most people take for granted – go outside and play on a nice sunny day.

The two girls, Amanda Clanton, 9, from Crosby, Texas, and Erica Lumas, 6, from Honduras, both suffer from a rare skin disorder called xeroderma pigmentosum or XP. Since there is no cure, those with the disorder can only curtail it by avoiding UV radiation, staying indoors with sunlight blocked out or by using protective clothing.

April 26 was the first day they were able to play in the sun without risk of getting skin cancer.

The girls and their families met at Space Center Houston with JSC officials along with representatives from the non-profit HED (Hypohidrotic Ectodermal Dysplasia) Foundation and Related Disorders of Hampton, Va., organization, and they each received a special UV protection suit that was developed from space-based technology.

The protective suits include a white jacket, pants, gloves and headgear, including goggles. The external garments protect the children’s sensitive skin from more than 99.99 percent of the sun’s UV rays. Underneath, the children wear a small cooling support system, necessary because full-body UV suits can get warm. The cooling unit has no moving parts, using 4 gel packs in a vest-like garment. The gel packs can supply cooling for two to four hours and can be recharged in a refrigerator in about 30 minutes.

After the girls received the suits, they put them on and boarded a tram for a short visit to Rocket Park.

The suits have made a huge impact in the lives of those who have used them, enabling them to go outside in daylight for the first time. The HED organization, through an agreement with JSC’s Office of Technology Transfer and Commercialization, has begun providing suits to the children who need them. It is estimated that several thousand children around the world suffer from various conditions that cause either sensitivity to light or problems in cooling their bodies.

“This project has been very rewarding to all those involved at JSC,” said Robert Dotts, assistant director of the Office of Technology Transfer and Commercialization. “To take technology developed in the Space Program and use it to improve the lives of these children is incredible. In most cases it not only improves their lives, but the lives of their whole family.”

“It’s amazing to think that because NASA astronauts walk in space and on the moon, children can now play in the sun,” said Sarah Moody, the HED Foundation’s founder and president. The suits are designed to cost under $2,000 and are now available in various colors. Many families, after years of having to deal with the restrictions of the child’s condition, can live more normal lives.

Please see TWO, page 7.

JSC Photos by Benny Benavides S99-05288

JSC hosts first annual Monica Lamb/NASA Science and Basketball Camp

About 100 students from the Houston Independent School District attended their own launch March 18 at JSC. Yes, “their own launch.” They built and launched their own rockets. The students participated in the first annual Monica Lamb/NASA Science and Basketball Camp at Texas Southern University, during spring break.

Please see the whole story on Page 5.

Astronaut Winston Scott, left, United Space Alliance employee Merlo Graves and Astronaut Joan Higginbotham welcome Houston Comets’ basketball player Monica Lamb to JSC.
ISS modules prior to Discovery’s docking with the station during STS-96. It demonstrated that higher power usage in the current generation provides adequate battery margins in the Zarya module while warming Unity’s shell temperatures, which is necessary for the safe operation of the station and crew inside it. The tests involved gradually increasing the power usage and monitoring the heat distribution to ensure the system is capable of handling the high power requirements without overheating.

Following an intensive six-month period of evaluation and interviews, the final selections will be announced in early 2000. Successful applicants will report to JSC as astronaut candidates in the summer of 2000 to begin more extensive training. 

Additional information on selection criteria and application forms is available electronically through the Astronaut Selection Office Web site at http://www.jsc.nasa.gov/shj/jobs/aos/aascan.htm

Space program and the economy: Onward and upward

By Jim Lovell

A s long as there has been a space pro- gram, there have been detractors. "What are we doing up in space when we’ve got real problems right here on earth?" I welcome that question since it gives me a chance to list the many benefits we receive every day that were first developed for space exploration. And that list keeps getting longer and longer.

Just last week I used a new ear thermo- meter to check the temperature of a squirming baby. The handheld device is but one example of how technology developed for space has returned to Earth.

Smoke detectors, hand-held vacuum cleaners, water filters and orthopedic braces are just some of the many household items first developed for use in space. The highly efficient foam insulation used in new homes was once used to protect fuel tanks on liquid-fueled rockets.

Portable X-ray machines, programmable pocket calculators, and personal computers were all pioneered as part of space program. Concentrated baby foods as well as the freeze-dried instant foods we feed our kids were first consumed in space. Many of the biotechnology techniques used to reduce stress were first developed for use by astronauts.

Satellites have revolutionized telecommunications and the global positioning system can help navigators on land, in the air or on the seas find their position to within 10 feet anywhere in the world.

The list goes on and on. Studies have shown that for every dollar spent on space development, $7 is returned to the economy in the form of a new product or service. But one space program spin-off is paying dividends greater than anyone ever imagined.

While the economy in many parts of the world is in shambles, the U.S. economy keeps humming along. Americans are earning more money than ever before. Unemployment is at all-time low. And, amazingly, inflation is virtually nonexistent.

Why is the American economy so strong? Economists, not generally known for brevity, answer with a single word: productivity. Since 1990, productivity has increased by as much as 54 percent. Corporate earnings could rise by 9 percent over the next decade. Corporate earnings could rise as much as 54 percent.

Scientific growth means economic growth. The economic foundations for this country’s not turn our backs on progress. There is still so much to discover — new medicines, new ways to protect the environment. 

Jim Lovell, commander of Apollo 13, is the founding chairman of the Space Alliance. With the power levels demanded by The Alliance’s public-awareness campaign encourages Americans to learn about the nation’s space program and to hear from us space. Readers may post electronic- mail messages for Mr. Lovell at www.SpaceConnection.org or the World Wide Web, or may write to Mr. Lovell at 2860 South Circle Drive, Suite 2301, Colorado Springs, CO, 80906.

ISS module operations, thereby simplifying the operations planning for the shuttle flight. Since launch, the station systems have been operating on about 600 watts of power. This test required extensive interaction between the control centers in Moscow and Houston to plan and conduct operations planning for the shuttle flight. “It was very important that there was a Moscow support group in Houston and a Houston support group in Moscow. And thanks to the close interaction of the specialists, we managed to reach a very good understanding.”

The second power test after the ISS was completed April 16, setting the stage for the arrival of Discovery. The test involved repositioning the station to point the Zarya solar arrays more directly up to the Sun to increase power generation. The test demonstrated the ability of Zarya to deliver 1,700 watts of power to Unity after docking. Additionally, during some of these tests, the ISS flight control team gained confidence that the combination of heating before docking and the low shell temperature at high altitude allowed the crew to enter the module. “In order to ingress the Unity module, we have to heat it up to a certain level to prevent condensation,” said Leena Joshi, Barry’s thermal operations resource officer.

The third and final test planned prior to STS-96 was carried out May 12. On April 29, the Russian flight control team uploaded an update to on-board software permitting use of only the small thrusters on the Zarya module. This update prevents Zarya’s 10 kilogram thrusters from firing during maneuvers while the shuttle is in proximity or docked to the ISS. During the test on May 12, Zarya was maneuvered through the sequence planned for shuttle docking to ensure the motion control system performs as expected with the software update.

ISS viewing opportunities from the ground can be found on the Internet at: http://spaceflight.nasa.gov/realdata/ tithings/
Community News

JSC makes first appearance at Houston International Festival

Alerts public to approaching center events

The 1999 JSC Earth Day event was celebrated on April 22 with exhibits at the Gilruth Center and tours of the newly planted “conservation landscape” on the south side of Bldg. 30. The theme of this year’s event was “Earth, Wind and Air: Preserving the Future.” About 500 people toured the exhibits. Exhibitors answered questions about Earth-friendly options for gardening, landscaping, recycling, wildlife and lots of other topics. Astronauts were on hand to sign autographs. About 200 people took the conservation landscape tour at Bldg. 30. Those who went on the tour got a free bedding plant similar to those planted at Bldg. 30.

Earth Day celebration draws large crowd

Pat Sprouse, foreground, and Angela Turner apply ink stamp “tattoos” featuring space shuttles, astronauts, planets, and rockets to the arms and hands of young visitors to the Johnson Space Center exhibit. JSC’s first exhibit at the annual Houston International Festival the third and fourth weekends of April was an outstanding success. More than 4,000 plastic bags with NASA’s logo on the side were given away to festival attendees who visited the booth. The exhibit was designed to alert the public to the approaching Open House event at JSC, August 28, and Inspection 99, November 3-5. Civil servant and contractor volunteers report they had fun representing JSC, while listening to zydeco music and Jerry Jeff Walker on the stage just across from their station.

JSC Photo S99-05267

Dawn Fadner of Kelsey-Seybold pets a Savannah monitor held by Sandy Richbook, Moody Gardens outreach coordinator, during Earth Day activities at the Gilruth Center. Astronaut Pamela Melroy signs autographs during Earth Day activities.

JSC Photo S99-05280 by James Blair

Children from JSC’s Day Care Center sing for Earth Day visitors at the Gilruth.

JSC Photo S99-05266

Mark Fox of Fox Landscaping gives a tour of the Bldg. 30 conservation landscape.

JSC Photo S99-05269

Hailey Fields, daughter of JSC employee John Fields, receives a free tree from the Texas Forest Service.

JSC Photo S99-05284

JSC Photo S99-05502

JSC Photo S99-05504

Photos by James Blair and Chris Rupert
High school students soar to new heights

“This is the most awesome thing I’ve ever done in my entire life. I learned how to communicate and get along with my crew. Everyone at NASA is so dedicated and enjoys their work so much.”

—Sally Rost, junior at Orangefield High School

A board NASA’s KC-135, Rost conducted her first experiment in microgravity. After three months of developing and planning their experiment, Rost and her fellow teammates were excited. Their experiment, designed to use the microgravity environment aboard the KC-135 to generate a 3-dimensional magnetic field, worked the way the team predicted.

“Our flight crew and our ground crew all worked well together,” said teammate Nancy Locke. “It was a great learning experience. First of all, we learned how magnetic fields interact; and through the experience. First of all, we learned how to work the way the team predicted. They worked the way the team predicted. Everyone at NASA is so dedicated and enjoys their work so much.”

In addition to learning important lessons in science and engineering, the students learned about the importance of organization. In addition, they were able to meet engineers and learn more about engineering so that they can explore whether or not they may be interested in entering the profession in the future. In the classroom it’s hard to give them this exposure. Moreover, the students learned not only about magnets, science and engineering but also about the importance of organization skills.

In addition to learning important lessons in engineering, science and math, the students gained a deeper appreciation of teamwork.

“Our experiences were an excellent way to measure the head motion of a dummy during microgravity,” said Erin Taylor, Van Alstyne High School student. “We learned the value of cooperation. We learned how to work together as a team.”

“The program brought the students together as a more cohesive group,” said Sally Rost, junior at Orangefield High School. “The program also gave them a wider perspective of what engineering is and how science can be applied to the skills that they learn in school.”

The opportunity to fly aboard the KC-135 followed a 3-month “internship” for the student flyers, during which time they worked with a JSC or contractor scientist or engineer who served as a team mentor. This experience was as important as the flight itself. It’s how the students learned about what engineers do and what opportunities are available in the profession.

“This was an incredible experience because it showed me and my students that NASA is made up of real people doing real things, and they are interested in education and engineering,” said John Spikeman, Booker T. Washington High School teacher. "This program resulted just by being around the people and the facilities involved.”

That is exactly the result NASA Space Grant Consortium are striving for with this program. The success of this year’s program resulted from the cooperation of many organizations. “The program would have been impossible to implement without the cooperation of JSC, the contractor community, Space Center Houston, the Texas Space Grant Consortium, the Texas Education Agency, and all of the teachers from the selected high schools,” said Sickorez. The program was so successful that many students are already looking forward to flying again once they begin their university studies.

“We tested torque on an object in microgravity,” said Brian Booth, Central Texas High School student. “If we were to do this experiment on the college level, we would have flyers to gain a broader range of experience.”
JSC hosts first annual Monica Lamb/NASA Science and Basketball Camp

A bout 100 students from the Houston Independent School District attended their own launch March 18 at JSC. Yes, “their own launch.” They built and launched their own rockets. The students participated in the first annual Monica Lamb/NASA Science and Basketball Camp at Texas Southern University, during spring break. The camp was the vision of Monica Lamb, center for the two-time championship Women’s National Basketball Association’s Houston Comets. After hosting expensive basketball camps around the country, Lamb was saddened that many inner-city children right here in Houston might not ever be able to attend such a camp because their families cannot afford the cost. Being a native Hous- tonian and a product of the HISD, she was determined to make sure that some underprivileged students in Hous- ton were afforded the opportunity to attend such a camp at no expense. She received moral support from the Houston Comets, but understood that she would have to endure the financial costs alone. Lamb had previously met and worked with Marilyn Donald, JSC equal employ- ment opportunity specialist, at other JSC-supported outreach programs designed to increase the number of minori- ties and females entering the science and engineering fields. Lamb contacted Don- ald to partner with JSC to make her vision a reality that the Comets and all of Houston could be a part of. Donald then contacted Space Center Houston and JSC employees Tamyra Martin, Keith Combs, Gladys Henderson, Pat Lawson and other members of the Houston National Techni- cal Association. This began a Lamb/NASA partnership that would produce one of the most exciting, rewarding, athletic and educational camps ever held in Houston. Texas Southern Uni- versity provided the facilities. JSC provided the classroom instructors and guest speak- ers, and Lamb provided the basketball lessons and other guest speakers, including Houston Comets’ basketball player Kim Perrot, Gail Wittermore-Smith, Angela Vong and Shana Appel of Texas STAR-BASE, a national nonprofit educational organization, provided a one-day train- ing course for JSC employees to teach them how to help the students build their rockets and classroom support the day the students built their rockets. Space Center Houston provided in-kind support including a launch pad and two employees to assist in the rocket launching. Donald told Lamb that education is the main goal when JSC participates in out- reach programs. Therefore, the camp was designed to give the students a full week of extensive but fun hands-on science projects with an emphasis on team- work and NASA-specific projects. Martin, Combs, Henderson, Lawton and other JSC engi- neers developed the entire curriculum for the camp and served as classroom instructors. Each day of the weeklong camp, the children completed one-half day of hands-on science projects and one-half day of basketball lessons. Classroom curriculum covered many topics including the solar system, the Extravehicu- lar Activity spacecraft, the effects of micro- gravity and rocket building. “I put my heart and soul into this pro- ject because so many inner-city children are not exposed early enough to how much math and science can benefit everyone,” said Martin. “The kids are afraid of math and science because their parents were, and I felt that it was my duty to share with them that math and science can be fun and rewarding to them as individuals and to society as a whole.” According to Combs, “Inner-city school students are not exposed to what NASA is really about or are unaware that there are unlimited career opportunities available here if they choose to pursue them. The students just might be inter- ested in and quite capable of making a significant contribu- tion to NASA’s mis- sions in the new mil- lennium if we mentor them at an early age.” The Monica Lamb/NASA Science and Basketball Camp was a rewarding opportunity to combine science, sports and team-building skills in a unique setting that allowed us to plant seeds that may grow as classroom instructors. Each day of the weeklong camp, the children completed one-half day of hands-on science projects and one-half day of basketball lessons. 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The students just might be interested in and quite capable of making a significant contribution to NASA’s missions in the new millennium if we mentor them at an early age.” The Monica Lamb/NASA Science and Basketball Camp afforded us an opportunity to do that.” Then came the grand finale. For the major hands-on science project, the students built mock rockets and launched them, 100 to 200 feet in the air, at an open field near Rocket Park. Astronauts Yvonne Cagle, Winston Scott and Joan Higginbotham assisted the students during the rocket launch to provide encouragement and serve as role models for the children. The energy, enthusiasm and intelligence the students displayed was overwhelming.

Russell Cowen of Space Center Houston helps the students place their rockets on the launch pad.

Monica Lamb/NASA Science and Basketball Camp committee members, from left, front, are: Marilyn Donald, Tamyra Martin, Winston Scott, Gladys Henderson and Keith Combs; back: Monica Lamb and Johnny Pelo.

Houston Comets’ player Kim Perrot, center, signs autographs.

It was an awesomely rewarding opportunity to combine science, sports and team-building skills in a unique setting that allowed us to plant seeds that may grow the next generation of minority and female scientists, engineers and astronauts for NASA.

-Marilyn Donald
NASA technology leads to oil patch patent

By稃Hellose, president of UNITECH International, Inc., decided to consolidate his Houston and Bergen, Norway, offices in the greater Clear Lake area in 1996 because of proximity to clients and access to NASA’s engineering. His decision paid off.

Within a year, UNITECH yielded a patent for the Multi Quick Connector stab plate based on technology discovered during one of JSC’s annual Inspection events. The MQC stab plate has generated millions of dollars in revenue and contributed to lowering production costs of oil and gas.

“Our annual Inspection is one of the many ways we work to share our technologies, expertise and state-of-the-art facilities with the business and academic community,” said JSC Director George Abbey. “UNITECH’s patented Multi Quick Connector is a prime example of how NASA’s research and technologies have been applied in many industries and

The MQC stab plate and was exposed to technologies that inspired the development and patent for UNITECH’s MQC stab plate.

“I was introduced to a number of technologies at NASA including robotics, manipulators and the loading arm used for the shuttle,” Hellose said. “Although NASA deals in space and UNITECH deals with the deep sea, we are still using the same principle of locking and unlocking payload. The difference is that NASA uses a step-by-step approach and we are attempting to complete it in one step. The step-by-step approach turned out to be our solution and it put us on the right track to developing and patenting the Multi Quick Connector stab plate.”

UNITECH uses Remote Operating Vehicles to connect and disconnect couplers under water. ROVs are necessary because control lines cannot be hooked up by divers in five to six thousand feet of water. The MQC stab plate operates under the guidance of a ROV and is significant because it improves reliability and safety during ROV docking and connection phases, all of its parts are retrievable, all of the critical seals, latching and locking details are on the ROV side and it offers a separation of couplers for test purposes, without requiring undocking. Since debating on the market, the MQC stab plate has generated approximately $5 million in revenue for UNITECH and contributes to lowering production costs of oil and gas.

“UNITECH continues to move forward in part because NASA allows people like me the opportunity to develop new ideas based on their existing technology,” said Hellose.
Revving up on recycling: delving into some trashy habits

The Environmental Stewardship’s Recycling Working Group has started delving into some trashy habits at JSC. The group has come up with some ways to improve existing recycling activities at JSC and will also look at new items that could be added to the center’s recycling program.

All of the items in the trash can are potentially recyclable except food waste (which could possibly be composted). And the white paper, aluminum cans and printer cartridges can be recycled at JSC. The group will be using these numbers to decide where to focus the center’s recycling program. There are other areas on site where different kinds of wastes other than typical office wastes are generated and these will be investigated, too.

As just about everyone knows, JSC currently collects and recycles aluminum cans and white paper. Cardboard is also collected, primarily from the Logistics area since so many items are received in cardboard. Currently, Tolman Building Maintenance picks up four to five tons of cardboard each month. Once collected, the cardboard is taken to a compactor at Bldg. 336, and the contents are emptied for recycling every two times a month. However, lots of hardware, computers, and other items are shipped in cardboard packaging and delivered directly to buildings on site. To find out where the majority of cardboard is generated, group members Chris Slade and Sandy Parker conducted a survey. First, they reviewed the number of items that are shipped through Logistics Central Receiving and determined which buildings receive the most packaging. These buildings include 3, 4, 5, 9, 10, 11, 16, 44, 45, and 227. Then, they visited each of the buildings and took photographs of the areas currently being used to collect the discarded cardboard packaging material.

As a result of the survey, BRSP, with funding and support of the Center Operations Directorate’s Logistics Division, is providing collection carts to allow employees to properly store the cardboard. More efficient storage will hopefully increase cardboard collection. Each of these buildings will be provided with a new cart, and the facility managers along with the appropriate shipping and receiving personnel will receive instructions for proper cardboard storage and pick-up once the cart is full. Also, look for a JSC announcement of the new cardboard collection procedure.

JSC Recycling Work Group members, from left, Robin Nini (USA), Vivian Preiss of the Center Operations Directorate and Mary Halligan of the Engineering Directorate place a poster with the results of a trash can audit on an aluminum can recycling bin prior to Texas Recycles Day last year. The information showed that a lot of recyclables are being thrown out at JSC.

To get a better idea of exactly what is in JSC’s trash, one of the group’s members went to a typical office trash can and found some surprising things. Here’s a breakdown:

<table>
<thead>
<tr>
<th>Item</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-white Paper/ Newspapers/Magazines</td>
<td>4.0 pounds</td>
</tr>
<tr>
<td>Wax Filler</td>
<td>1.5</td>
</tr>
<tr>
<td>3-Color Printer Cartridges</td>
<td>2.5</td>
</tr>
<tr>
<td>2 Glass Bottles</td>
<td>0.5</td>
</tr>
<tr>
<td>Newspaper and Magazines</td>
<td>2.0</td>
</tr>
<tr>
<td>Plastic CD Boxes</td>
<td>0.5</td>
</tr>
<tr>
<td>Cardboard</td>
<td>0.4</td>
</tr>
<tr>
<td>Food Waste</td>
<td>0.4</td>
</tr>
<tr>
<td>11 Aluminum Cans</td>
<td></td>
</tr>
<tr>
<td>Spray Can</td>
<td>0.25</td>
</tr>
<tr>
<td>Plastic Beverage Bottle</td>
<td>0.05</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>~10.5 pounds</td>
</tr>
</tbody>
</table>

The 19.2 million tons of Texas municipal solid waste would fill two lanes of I-10 from Reilly to El Paso 10 feet high. In the U.S., 8 out of 10 people are willing to separate household trash for recycling.

For more information about the JSC Recycling Working Group, or would like to join the group, please contact Jo Kines of the Environmental Services Office or Robin Nini of United Space Alliance.

Two special girls

The organization began in 1986 when Moody sought help from Langley Research Center in finding a cooling garment for her nephew, who suffered from HED. Victims of HED lack sweat glands, which can lead to heat stroke, heat exhaustion and even death.

The foundation also provides cooling garments to children with multiple sclerosis, spina bifida, cerebral palsy and other disorders. A documentary on that use of technology, offered Moody the concept for the UV-protection garment and a fashion model donated money to the foundation. Word spread and more donations came from other sources.

The first three suits distributed were prototypes provided by NASA. The foundation has provided 15 additional UV suits, most to children suffering from XP disease. The most recent was in January – it went to a 5-year-old girl in Keystone Heights, Fl.

For more information, contact the HED Foundation at Box 9241, Hampton, Va, 23667, or at http://www.hedfoundation.org.
May 28
Apollo 10 anniversary: The NASA Alumni League will sponsor a celebration of the 30th anniversary of Apollo 10 at the Radisson-Hobby, May 28. See the National Space Station’s International Space Development Conference registration form at http://www.ssa.org/issc. Those interested in attending may also contact Norm Chaffee at 281-483-3777 or Chet Vaughan at 281-336-4140. For additional information about the ISSC, contact Marianna Dymoff at 281-486-0747. For details about the Apollo 10 celebration, contact Don Brown at 281-488-0754.

June 3
Warning System Test: The site-wide Employee Warning System will perform its monthly audio test at 6 a.m. ET on June 3. For details, call Tami Barbour at 281-488-0754.

June 7
NSBE meets: The Society of Black Engineers will meet at 6:30 p.m. June 7 at Texas Southern University, School of Technology, Phys. 104. For additional information, call Lawanda Mitchell at 713-741-2328.

June 9
IAAP meets: The Clear Lake/NASA Chapter of the International Association of Administrative Professionals (formerly Professional Secretaries Internation) will meet at 7:30 p.m. June 9 at Bay City Country Club. Cost is $18. Reservations and reservations can be made at 281-248-0550, x238.

June 10
MAES meets: The Society of Mexican American Engineers and Scientists will meet at 11 a.m. June 10 in Bldg. 16, Rm. 111. For details, call George Salazar at x30165.

GILRUTH CENTER NEWS

Hours: The Gilruth Center is open from 6:30 a.m.-10 p.m. Monday-Thursday, 6:30 a.m.-9 p.m. Friday, and 9 a.m.-2 p.m. Saturday. Contact the Gilruth Cen- ter at 281-485-3345.

Sign up policy: All classes and athletic activities are on a first-come, first-served basis. Sign up in per- son at the Gilruth Center and show a yellow Gilruth or Gilruth badges. Sign up at x38520 for more information.

Dependents must be between 16 and 23 years old.

Intervention program: Six-week program includes lectures, a private consultation with the dietitian and blood analysis to chart your progress. Program is open to all employees, contractors and spouses. For additional information call Tammie Shaw at x32980.

Defensive driving: One-day course is offered once a month at the Gilruth Center. Pre-registration required. Cost is $25. Call for next available class.

Weight safety: Required course for employees wishing to use the Gilruth weight room. Pre-registration is required. Cost is $5. Annual weight room use fee is $90. The cost for additional family members is $50.

Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is $24 for eight weeks.

Step/bench aerobics: Low-impact cardiovascular workout. Classes meet from 5:15-6:15 p.m. Tuesdays and Thursdays. Cost is $32 for eight weeks. Call Kris- ten Taragzewski, instructor, at x38951 for additional information.

Yoga: Stretching class of low-impact exercises designed for people of all ages and abilities in a Westernized format. Thursdays 5-6 p.m. Cost is $32 for eight weeks. Call Daniel Malul, instructor, at x38952 for more information.

Ballroom dancing: Classes meet from 7-8:15 p.m. Thursdays for beginner advanced classes and from 8:15-9:30 p.m. for beginner-intermediate and intermediate students. Cost is $60 per couple.

Country and western dancing: Beginner class meets 7-8:15 p.m. Monday. Advanced class (must know basic steps to all dances) meets 8:30-10 p.m. Monday. Cost is $20 per couple.

Fitness program: Health-related fitness program includes a medical screening examination and a 12-week individually prescribed exercise program. For additional information call Larry Wier at x30031.

Office of Criminal Investigations Hot Line
The Office of Criminal Investigations is the investigative arm of the NASA Inspector General. The primary mission of this component is to conduct criminal and civil investigations of suspected or reported fraud and waste by employees, contractors, and others relating to the administration of NASA contracts and programs. Although much emphasis is placed on major procurement fraud (particularly allegations of product substitution, cost mischarging, kickbacks, anti- trust violations, and procurement misconduct), investigations are also conducted of theft, conflict of interest, environmental and hazardous waste violations, health care fraud, and computer-related crimes. The OCI also provides fraud briefings for government and commercial employees that are designated to highlight potential risks concerning safety, fraud, waste or mismanagement. To schedule a briefing, call 281-483-8427. To report suspected violations, call 281-483-8427 locally or the toll free Hotline at 1-800-424-9183, or write: NASA Inspector General, P.O. Box 25099, J’Lennet Plaza Station, Washington, DC 20024. The OCI Que-Hotline can be accessed at http://www.hq.nasa.gov/office/oig/.

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Step/bench aerobics: Low-impact cardiovascular workout. Classes meet from 5:15-6:15 p.m. Tuesdays and Thursdays. Cost is $32 for eight weeks. Call Kristen Taragzewski, instructor, at x38951 for additional information.

Yoga: Stretching class of low-impact exercises designed for people of all ages and abilities in a Westernized format. Thursdays 5-6 p.m. Cost is $32 for eight weeks. Call Daniel Malul, instructor, at x38952 for more information.

Ballroom dancing: Classes meet from 7-8:15 p.m. Thursdays for beginner advanced classes and from 8:15-9:30 p.m. for beginning-intermediate and intermediate students. Cost is $60 per couple.

Country and western dancing: Beginner class meets 7-8:15 p.m. Monday. Advanced class (must know basic steps to all dances) meets 8:30-10 p.m. Monday. Cost is $20 per couple.

Fitness program: Health-related fitness program includes a medical screening examination and a 12-week individually prescribed exercise program. For additional information call Larry Wier at x30031.