Professional Reading

"Space Notes" excerpts professional articles of interest to Space professionals. The section will attempt to present a broad spectrum of newsworthy items, with references to the full article for those who wish to read further. Suggestions and submissions for this section are solicited, and should be forwarded to the Managing Editor at richard.burks@smdc-cs.army.mil.

India plans to build long-range missiles with Israel: official

NEW DELHI (AFP) Aug. 31, 2004

India, which tested an indigenously-built ballistic missile on Sunday, is holding talks with Israel about joint production of a long-range missile, the country's chief military scientist announced on Tuesday.

Japanese military wants fatter budget for missile defense, intelligence

TOKYO (AFP) Aug. 31, 2004

Japan's military pressed Tuesday for a 35 percent jump in spending on missile defense and intelligence systems for the next financial year to cope with new risks such as guerrilla attacks.

The request is part an overall budget demand by Japan's defense agency for 4.93 trillion yen for the fiscal year starting in April 2005, a rise of 1.2 percent from this year.

Maintenance Work Paying Off For ISS Crew

Houston TX (SPX) Aug. 30, 2004

"Success" is the key word this week aboard the International Space Station (ISS) as maintenance efforts by the Expedition 9 crew paid off on several major equipment items.

NASA ISS Science Officer Mike Fincke performed the most complex spacesuit repair job ever conducted in flight on a U.S. spacesuit. He replaced a water pump in the suit's cooling system.

The four-and-a-half-hour replacement job on Monday was followed by several hours of tests on Tuesday. The tests showed the new pump worked perfectly, and engineers on the ground will now determine whether to declare the spacesuit usable in the future.

Fledgling Space power China launches scientific satellite

BEIJING (AFP) Aug. 29, 2004

Fledgling Space power China Sunday launched a satellite from a remote desert region for a short-term scientific mission, state media reported.

The satellite, atop a Long March 2C carrier rocket, blasted off mid-afternoon from the Jiuquan launch center in northwestern Gansu province, the Xinhua news agency reported.

The satellite, which will remain in orbit for just a few days before returning to Earth, will be used for land surveying, mapping and other scientific experiments, the agency said.

U.S. Army's Tactical High Energy Laser Shoots Down Mortar Rounds

Redondo Beach CA (SPX) Aug. 27, 2004

The Tactical High Energy Laser, built by Northrop Grumman for the U.S. Army, shot down multiple mortar rounds Aug.. 24, proving that laser weapons could be applied on the battlefield to protect against common threats.

gearing up to begin hardware integration early next year and is on track to launch in September 2006, according to Program Manager Lt. Col. James Shoemaker.

Begun in 2002, Orbital Express is developing technologies for refueling, upgrading, and reconfiguring spacecraft while in orbit. Originally budgeted at roughly $100 million, the program's future was threatened earlier this year when its cost, excluding launch costs, ballooned to $240 million.

Newest Lockheed Martin-Built GPS Satellite Begins Service for Navigation Users Worldwide

Tuesday July 20, 9:02 am ET

FARNBOROUGH AIR SHOW, July 20 /PRNewswire-FirstCall/ — Lockheed Martin (NYSE: LMT — News) and the U.S. Air Force have completed on-orbit checkout of the upgraded Global Positioning System (GPS) satellite launched successfully June 23 from Cape Canaveral. The spacecraft has been declared fully operational for military and civilian navigation users around the globe.

Built by Lockheed Martin in Valley Forge, Pa., the satellite, designated Space Vehicle Number (SVN) 60 and GPS Mission IIR-12, is the third Block IIR to feature a high-performance antenna panel designed to provide greater signal power to navigation users. The current constellation of 29 GPS satellites now includes 11 fully operational Block IIR spacecraft, which were developed to improve global coverage and increase the overall performance of the global positioning system

Lockheed Martin Selected by Pentagon to Develop Prototype Communications System

Associated Press
Monday July 19, 3:16 p.m. ET

AKRON, Ohio (AP) — Lockheed Martin Corp. said it will lead a team selected by the Pentagon to develop a prototype communications system to keep commanders in touch in wartime.

Lockheed Martin's Akron-based Maritime Systems and Sensors unit will be the prime contractor for the project, which has an initial value of $15 million, the company said Monday.

The other companies participating are ITT, L3Com, BAE Systems, Adaptive Optics Associates, Accipter Systems, EMS and Dayton Aerospace, Lockheed Martin said.

The project will combine the speed of laser-based communications with the dependability of radio frequencies. The system would adapt to changing conditions, including heavy data needs.

The goal is to test a prototype in the field in 1 1/2 years and have a flight test in 2 1/2 years

Lawmaker: Missile testing to stay on Kauai

Associated Press
July 19, 2004

LIHUE, Hawaii — Sen. Daniel Inouye says the military's program for testing medium-range missile interceptor rockets will remain at the Navy's Pacific Missile Range Facility on Kauai, according to a spokesman.

"Due to the unique location and breadth of the Pacific Missile Range, Senator Inouye is assured that Barking Sands will remain the premier choice for longer-range missile testing well into the future," spokesman Mike Yuen said.

Earlier this month, Sen. Pete Domenici, R-N.M., asked the Defense Department to look into the possibility of taking the missile testing mission away from the Navy range at Barking Sands, on the western tip of Kauai, and moving it to the Army's White Sands Missile Range in his home state.

For the past decade, interceptor missiles designed to knock down hostile rockets have undergone preliminary tests at White Sands. Missiles then are sent either to Kauai or to the Army's missile range at Kwajalein in the Marshall Islands for final testing.

In tests representative of actual mortar threat scenarios, the THEL test bed destroyed both single mortar rounds and mortar rounds fired in a salvo at White Sands Missile Range, NM.

The tests were conducted by the Army as part of the Mobile THEL (MTHEL) program. The MTHEL program is the responsibility of the SHORAD Project Office under the U.S. Army's Program Executive Office for Air, Space, and Missile Defense.

Collaboration Of Manned, Unmanned Aircraft Demonstrated For UCAR Program

Owego NY (SPX) Aug. 24, 2004

Lockheed Martin successfully completed a demonstration of manned and unmanned aircraft collaboration as one of the advanced command and control concepts it is developing for its Unmanned Combat Armed Rotorcraft (UCAR) program.

The goal of UCAR is to demonstrate the technical feasibility, military utility, and operational value of an unmanned rotorcraft system capable of autonomous collaboration with manned and unmanned air and ground systems.

The Defense Advanced Research Projects Agency (DARPA) is developing the UCAR system jointly with the U.S. Army.

Fuel Cell Driven Tablet Brings Wearable Computers To U.S. Air Force

Scottsdale AZ (SPX) Aug. 24, 2004

General Dynamics C4 Systems, a business unit of General Dynamics has been awarded a contract by the United States Air Force (USAF) to develop and deliver 10 prototype tablet computers powered by direct liquid fuel cells for evaluation as a potential replacement for the department's current ground air traffic control computers.

The program will combine commercial-off-the-shelf computer equipment with privately developed fuel cell technology, and could enable extended field operations that will reduce the USAF's reliance on centrally located recharging apparatus and spare batteries.

Raytheon Delivers Exoatmospheric Kill Vehicle Payloads For Fort Greely

Tucson AZ (SPX) Aug. 18, 2004

Raytheon has delivered the first deployable flight elements of the Missile Defense Agency (MDA) Ground- based Midcourse Defense (GMD) program from its Missile Defense Kinetic Kill Vehicle production facility in Tucson, Ariz.

The Exoatmospheric Kill Vehicle (EKV) payload is designed to intercept hostile ballistic missile targets outside the atmosphere in the midcourse phase of flight.

The delivered payloads evolved from the EKV design that has been successfully flight tested over the last four years. By September, Raytheon will have delivered all required EKVs for the GMD program's initial deployment and testing.

Europeans May Aid U.S. Firms With Star Wars

Paris (SPX) Aug. 17, 2004

American defense contractors Lockheed Martin and Northrop Grumman say they will cooperate closely with European companies on the development of George W. Bush's so-called "Star Wars" missile defense system.

In a joint memorandum of understanding with EADS, the companies said they would work together to develop missile defense systems for the United States, Europe and Asia.

Orbital Express Program On Track For Launch In September 2006

By Jefferson Morris

07/15/2004 09:32:41 AM

The Defense Advanced Research Projects Agency's (DARPA) Orbital Express satellite servicing demonstration program is