



Director's Report

January 3, 2006

The Satellite Industry Association (SIA) Director's Report is a weekly executive capsule covering current satellite industry news and events.

Your comments are appreciated. Please contact Cindy Spiers at (202) 349-3632.

If you would like to unsubscribe to this list, please email cspiers@sia.org.

Recent News

The **Director's Report** was on a brief hiatus during the month of December. The following Report summarizes major events during that time as well as current news.

Sea Launch has received a firm contract award from **Hughes Network Systems** for the launch of the SPACEWAY 3 communications satellite, projected for early 2007. A Sea Launch Zenit-3SL vehicle will launch the SPACEWAY 3 satellite, with a mass of more than 6000 kg, to geosynchronous transfer orbit from the *Odyssey* Launch Platform, positioned on the Equator. Sea Launch's direct insertion into equatorial orbit is expected to yield additional years of life for the spacecraft, which will provide services to the North American market. This was the eighth new launch contract Sea Launch signed in 2005. SPACEWAY satellites are the first to be designed for broadband data communications and have the ability to switch and route traffic on board, enabling single-hop communications between any two satellite terminals, eliminating the need for the traffic to be routed through a central hub Earth station. SPACEWAY's advanced antenna technology allows the dynamic formation and shaping of spot beams creating the opportunity to manage capacity flexibly and to deliver true bandwidth-on-demand services.

Loral Space & Communications Inc. has begun trading its common stock on the NASDAQ National Market. The stock had previously been trading on a "when issued" basis on the over-the-counter market. The company issued 18.7 million shares, or approximately 94 percent, of the 20 million new shares of Loral Space & Communications Inc. common stock to be distributed in accordance with Loral's plan of reorganization. Also in accordance with the plan, Loral Skynet issued 987,000 shares, or approximately 99 percent, of the Loral Skynet preferred stock to be distributed. *Story courtesy of SatNews Daily*

Space Systems/Loral also announced that it has been selected by **EchoStar Communications Corporation** to build EchoStar XI, a new direct broadcast satellite (DBS) based on SS/L's 1300 platform that will support EchoStar's DISH Network and serve as backup to its existing fleet. EchoStar XI, anticipated to be delivered in early 2007, will be the fifth SS/L-built satellite in the EchoStar fleet.

EchoStar was given Federal Communications Commission approval to use a **Telesat Canada** satellite for delivery of services to customers in the United States. The FCC's International Bureau granted EchoStar's request for a blanket authorization allowing customers to receive programming via Ku-Band

capacity on Telesat's Anik F3 spacecraft, which will be located at 118 degrees. The Telesat orbital slot is near EchoStar's satellites at 119 degrees. The DBS company also operates satellites at 110 degrees. *Story courtesy of SkyREPORT*

DirecTV launched two additional markets, New York and Los Angeles, for its local HDTV initiative. DirecTV is delivering the local HDTV services through MPEG 4 AVC compression technology. New York and Los Angeles are among dozens of cities that will receive HD local programming from DirecTV using MPEG-4 AVC and advanced modulation that more than doubles the efficiency of capacity available via the satellite TV service. *Story courtesy of SkyREPORT*

SES Global and **New Skies Satellites** announced that they have entered into a binding agreement pursuant to which SES Global will acquire 100% of New Skies by way of a merger under Bermudian law. The cash-only transaction values New Skies at an enterprise value of US \$1.160 billion. New Skies is the world's fifth largest satellite operator based on transponder capacity, with five spacecraft positioned at strategic orbital locations around the globe and an additional satellite due for launch in 2006. With its complementary satellite fleet, New Skies' satellite assets will extend SES' presence in India, the Middle East and Africa as well as in Latin America, allowing SES better to meet its customers' requirements for global service offerings. In addition, New Skies' customers will benefit from the expansion capacity, redundancy and broad service offerings provided by the larger SES fleet and organization. The transaction is conditional upon Federal Communications Commission approval.

The AMC-23 satellite built for **SES Americom** was successfully launched on an **International Launch Services** Proton/Breeze M launch vehicle from the Baikonur Cosmodrome in Kazakhstan. Once in service, the satellite will be used by **Connexion by Boeing** and other customers for trans-Pacific services. *Story courtesy of SkyREPORT*

International Launch Services, a Lockheed Martin joint venture, has scheduled the launch of the ASTRA 1KR satellite on an Atlas V vehicle for April 2006. This is scheduled to be the first Atlas mission for **SES Astra**. The ASTRA 1KR mission results from contractual arrangements signed last year for launches of three satellites for SES Global companies. The companies agreed to use a mix of Atlas and Proton vehicles to provide flexibility in accommodating satellite readiness and meeting schedule demands. *Story courtesy of SpaceDaily*

Iridium Satellite has signed an agreement with China Space Mobile Satellite Telecommunications to provide Iridium services and products. China Spacecom will be responsible for the establishment, development, provisioning and management of Iridium services throughout China for both domestic and international use. China Spacecom will develop satellite communication packages to address voice, data and asset tracking applications in maritime, aeronautical and land-based sectors. *Story courtesy of SpaceDaily*

XM Satellite Radio will broadcast select music channels in 5.1 Surround Sound. This is the first time a radio company has broadcast audio in the format 24 hours a day. XM manufacturing partners such as Denon, Onkyo, Pioneer and Yamaha will

introduce home audio systems capable of playing XM HD Surround powered by Neural Audio in 2006. *Story courtesy of SkyREPORT*

Inmarsat will play a key role in one of Europe's largest industrial projects, the construction of Galileo, the European equivalent to the US's Global Positioning System (GPS). A consortium of eight leading aerospace companies and satellite operators, including Inmarsat, Aena, Alcatel, EADS Space Services, Finmeccanica, Hispasat, Thales and TeleOp, have signed up to help develop Galileo to provide a highly accurate, guaranteed global positioning service under civilian control. It will be interoperable with the US Global Positioning System (GPS) and Russia's Global Navigation Satellite System (Glonass), the two other global satellite navigation systems. *Story courtesy of SpaceDaily*

NASA announced that **Alliant Techsystems** will become the prime contractor to design, develop, test, and evaluate the First Stage propulsion system for its next-generation Crew Launch Vehicle (CLV). ATK said the scope of work adds substantially to that performed by the company on the space shuttle program. ATK said opportunities for additional scope on space exploration missions include crew escape designs, lunar-lander systems, thermal and radiation shielding, and advanced lightweight materials. *Story courtesy of SatNews Daily*

Inmarsat launched its Broadband Global Area Network (BGAN) which is billed as the world's first mobile communications service to provide both voice and broadband data simultaneously through a truly portable device on a global basis. It is

also the first to offer guaranteed IP data rates on demand. Delivered via the Inmarsat-4 satellites, the service is initially available across Europe, Africa, the Middle East and Asia. Following the successful launch of Inmarsat's second I-4 satellite, network coverage will be extended to North and South America from second quarter of 2006. The two I-4 satellites will deliver seamless broadband coverage across 85 percent of the world's landmass and be available to 98 percent of the world's population. *Story courtesy of SatNews Daily*

Globalstar received approval from the U.S. State Department for its plan to procure launch services for up to eight spare satellites with launches scheduled to begin in early 2007. Globalstar reported that it has executed a contract with Starsem, provider of the Soyuz launch vehicle. Starsem has successfully conducted six previous Globalstar launches using Soyuz launch vehicle. Like the previous launches, the Globalstar spare satellites will be launched from the Baikonur Cosmodrome in Kazakhstan. *Story courtesy of SatNews Daily*

AeroAstro, a microsatellite technology company, announced the successful installation of a new AeroAstro SENS Applique at the ground station in Meekatharra, Australia operated by **Globalstar Australia Pty Limited**. The unit, one of several new SENS Appliques purchased by **Globalstar LLC**, will provide coverage to the western region of the continent. The SENS Applique, an add-on to existing Globalstar ground stations, receives and decodes remote sensing data from field transmitters via the Globalstar LEO satellite network. It digitizes RF signals and extracts SENS

message packets despite interference or overlapping transmissions, and transmits these messages through the Internet.

NASA is preparing to launch the first spacecraft to Pluto and its moon Charon. The January 2006 launch of **New Horizons** will complete the initial reconnaissance of the planets in the solar system as part of the Vision for Space Exploration plan which includes a return the space shuttle safely to flight, complete the construction of the International Space Station, take humans back to the moon and eventually to Mars and beyond. Designed and built at the Johns Hopkins University Applied Physics Laboratory, Laurel, Md., pending launch approval, New Horizons is set to launch from Cape Canaveral Air Force Station, Fla., no earlier than Jan. 17, 2006. The launch window extends until Feb. 14, 2006. Launch before Feb. 3 allows New Horizons to fly past Jupiter in early 2007 and use the planet's gravity as a slingshot toward Pluto. The Jupiter flyby trims the trip to Pluto by five years. *Story courtesy of Space Daily Express*

The Senate has approved legislation that contains provisions for the nation's eventual switch to digital TV, including the establishment of Feb. 17, 2009, as the "hard-date" for the transition. The measure was part of the larger Deficit

Reduction Act of 2005, and needed a tie-breaking vote from Vice President Dick Cheney for final passage. The bill requires the spectrum auctions, and a release from the Senate Commerce Committee suggested that that effort could raise close to \$10 billion for deficit reduction. When broadcasters vacate analog spectrum in February 2009, public safety personnel will have access to 24 MHz of spectrum recovered in the transition. The legislation also requires the auction of recovered spectrum by January 2008. Additionally, the legislation also allocates up to \$1.5 billion in assistance for consumers who rely on over-the-air broadcasting and need a converter box in order to continue receiving TV signals once the digital switch is complete. The final bill also stripped out a provision that would have permitted cable operators to down-convert HDTV signals into a "standard definition" signal. *Story courtesy of SkyREPORT*

Upcoming SIA Meetings and Events

6 February 2006 SIA Satellite Leadership Dinner, Folger Shakespeare Library, Washington DC. [Invitation only]

6-9 February 2006 SATELLITE 2006, Washington, D.C. Convention Center
www.satellite2006.com

3-6 April 2006 United States Space Foundation Symposium, "22nd National Space Symposium", Colorado Springs, Colorado www.spacefoundation.org



Director's Report

January 3, 2006

11-15 June 2006 ISCe Conference, San Diego, CA www.isce.com

10-12 October 2006 United States Space Foundation Symposium, "Strategic Space 2006", Omaha, Nebraska www.spacefoundation.org