

APSCC Monthly e-Newsletter

April 2018

The **Asia-Pacific Satellite Communications Council (APSCC) e-Newsletter** is produced on a monthly basis as part of APSCC's information services for members and professionals in the satellite industry. Subscribe to the APSCC monthly newsletter and be updated with the latest satellite industry news as well as APSCC activities! To renew your subscription, please visit www.apscc.or.kr. To unsubscribe, send an email to info@apscc.or.kr with a title "Unsubscribe."

News in this issue has been collected from March 1 to March 31.

INSIDE APSCC

APSCC 2018 Satellite Conference & Exhibition, 2-4 October, Shangri-La Hotel, Jakarta, Indonesia

The APSCC Satellite Conference and Exhibition is Asia's must-attend executive conference for the satellite and space industry, where business leaders come together to gain market insight, strike partnerships and conclude business deals. The APSCC 2018 Satellite Conference & Exhibition will incorporate industry veterans and new players into the program to reach out to a broader audience. Mark your calendar for the APSCC 2018 and expand your business network while hearing from a broad range of thought provoking panels and speakers representing visionary ideas and years of business experience in the industry. Contact info@apscc.or.kr for general inquiries to the APSCC 2018.

Global Satellite Coalition Established

March 13, 2018 - Six of the world's leading satellite industry associations have established the "Global Satellite Coalition" (GSC), an international group through which targeted initiatives will be coordinated and implemented with the combined support of hundreds of member companies based in every world region. The coalition will drive industry priorities with one voice, unlocking opportunities for industry growth and ensuring the future for millions of stakeholders who depend on satellite-based solutions. The GSC's ultimate objective is to secure an ecosystem that allows every world citizen to be connected. The founding partners of the GSC include the following organizations: Abrasat (Brazil), APSCC (Asia Pacific), CASBAA (Asia Pacific), EMEA Satellite Operators Association (Europe, Middle East, Africa, CIS), Global VSAT Forum (World), Satellite Industry Association (USA). Responding to the rapid pace of change in the digital world and huge demands for connectivity, the GSC will foster awareness and understanding of game-changing satellite industry innovations and their implications for spectrum and regulatory policymaking and market development. The GSC's priority is to advocate the role of satellite in achieving complete connectivity from contributing to the UN's Sustainable Development Goals (SDGs) and the Broadband Commission's connectivity objectives to realizing the Network of Networks required for 5G. In addition, it will work on ensuring satellite services are an essential element of national broadband strategies, universal service programs and disaster preparedness efforts.

SATELLITE BUSINESS

SKY Perfect JSAT to Invest in KVH for Collaboration in Maritime Satellite Connectivity

March 1, 2018 - SKY Perfect JSAT Corporation (SJC) announced that SJC has made the decision to invest in KVH Industries, Inc. SJC began a mobile communications roaming partnership with KVH in June 2009 in order to roll out its OceanBB maritime broadband service worldwide, and launched in April 2010. In order to further strengthen ties between the two companies in preparation for the launch of OceanBB plus, the faster, next-generation maritime broadband service, SJC has decided to invest in KVH. SJC will work to further enrich maritime communications to provide customers with even greater levels of satisfaction.

Comtech Awarded Three Year \$123.6 Million Contract from U.S. Army

March 5, 2018 - Comtech announced that during its second quarter of fiscal 2018, its Command & Control Technologies group, which is part of Comtech's Government Solutions segment, has received a three year contract award valued at approximately \$123.6 million to provide ongoing sustainment services for the AN/TSC-198A SNAP (Secret Internet Protocol Router (SIPR) and Non-classified Internet Protocol Router

(NIPR) Access Point), Very Small Aperture Terminals (VSATs). SNAP terminals provide quick and mobile satellite communications capability to personnel in the field and Comtech will be the sole provider of these sustainment services. The contract was initially funded at \$3.1 million with additional funding expected to occur across the performance period.

BridgeSat Opens World's First NOC for Laser Satellite Communications

March 5, 2018 - BridgeSat announced the opening of its network operations center (NOC), the world's first for free-space optical communications. The opening is an industry milestone toward revolutionizing global communications with a laser-based ground network for low earth orbit (LEO) and geostationary earth orbit (GEO) satellites that's faster and less expensive than traditional radio frequency (RF) solutions. Located in Denver, the new BridgeSat NOC provides monitoring, management and control for all operational functions, including the optical ground station (OGS) network and customer payload repository.

Marlink Completes OmniAccess Acquisition

March 5, 2018 - Superyacht broadband connectivity services and solutions provider OmniAccess has become part of the Marlink Group, following the closing of the transaction that was first announced in November 2017. The 2002 founded, Majorca-based company will continue to operate under the highly-regarded OmniAccess brand and will lead the superyacht and boutique cruise segment of the Marlink Group going forward. As from today, the management teams of OmniAccess and Marlink will work closely together with the ambition to ever better serve their customers and to be at the forefront of the satcom industry.

Inmarsat and Airservices Australia Partner to Improve Aviation Safety and Efficiency

March 5, 2018 - Inmarsat has partnered with Airservices Australia to initiate satellite voice (SatVoice) communications evaluations for air traffic services in Australia in areas beyond the reach of traditional VHF voice coverage. Through the partnership with Inmarsat, Airservices Australia will help airlines and operators to complement conventional voice communications equipment with modern digital technology. The evaluation is working toward two important customer benefits: more effective and ultimately safer aviation safety services over the oceans and remote areas, and lower weight for avionics, contributing towards reduced fuel burn and greenhouse emissions. SatVoice communications is a two-way channel, satellite-based service that enhances accuracy in cockpit communications and therefore aircraft safety. The system enables faster and better quality voice communications between flight deck crew and designated contacts on the ground, including air traffic controllers and airline operations personnel.

Telstra Expands in the Middle East with its Telstra Programmable Network and New Office in Dubai

March 6, 2018 - Telstra announced the expansion of its business in the Middle East with the Telstra Programmable Network soon to be available via a new point of presence (PoP) in Dubai in addition to a new office in the city-state. The new PoP will offer flexible and dynamic access to Telstra's high bandwidth, low latency and secure network to support businesses operating in the region. The Telstra Programmable Network is a leading digital platform for enterprise network services, built on Software-Defined Networking. Businesses with operations in Dubai will be able to optimise their IT through automated, near real-time provisioning of new applications and services without the need for significant infrastructure upgrades. The network also provides consumption-based pricing and secure access to multiple cloud services via a simple user interface.

Thales Alenia Space and Inmarsat to Enhance Air Traffic Management in Europe with ESA

March 6, 2018 - Thales Alenia Space and Inmarsat will work together with the European Space Agency (ESA) on Iris, a ground-breaking programme that will enhance air traffic management in Europe. The programme, which supports the Single European Skies ATM Research (SESAR) masterplan, will develop satellite communication services that support more efficient air traffic management, including the continuous exchange of information on aircraft flight position and waypoints, allowing pilots and air traffic controllers to fly closer to optimum flight paths that save fuel and cut CO2 emissions, while also reducing flight times. Powered by Inmarsat's new SB-S platform, which is already being deployed by airlines, Iris's enhanced IP-based capabilities will relieve pressure on currently crowded VHF radio links, which are near capacity.

NorthTelecom & Omantel Signed an Agreement to Extend Satellite Capacity

March 7, 2018 - NorthTelecom & Omantel had extended their agreements and added a new transponders deal to the previously signed agreement between both operators covering current Ku band satellite capacity. The new deals will include renewing the current Ku band along with implementation of future KA Band Network for OmanTel for its national and international Network reach.

Comtech EF Data Expands Heights Networking Platform Portfolio

March 7, 2018 - Comtech EF Data Corp. expanded its Heights Networking Platform portfolio to include three new and innovative Remote Gateways. The new Remote Gateways include both indoor and outdoor models - the indoor H-Plus Remote Gateway, and two outdoor units, the H-Plus-ODU Remote Gateway and the H-Pro-ODU Remote Gateway. The offerings provide customers with targeted Heights and Single Channel Per Carrier (SCPC) solutions to address specific market needs and technology trends that are shaping the satellite communications community. The H-Plus Remote Gateway is aptly named. It gives customers the flexibility to choose between Hub and Spoke VSAT connectivity "Plus" the option to run in true SCPC mode. Providers that are targeting mid-tier VSAT services or that would prefer to start with a simple hub-less SCPC network can utilize a single device that allows them to convert from true point-to-point SCPC mode of operation to Hub and Spoke VSAT operation without changing hardware.

Australia's Largest Urban Fire Service Integrates PTT Tech Developed by Cobham

March 7, 2017 - Fire & Rescue New South Wales, Australia's largest urban fire service and the fourth largest in the world, has integrated cutting-edge Push-to-Talk (PTT) technology developed by Cobham and its partner Wireless Innovation within its existing communications network. By combining satellite and land mobile radio into a single ubiquitous network, the new technology significantly extends the reach of data and voice communication across the 880,000 km² New South Wales land mass that the service is responsible for. Cobham SATCOM's EXPLORER PTT solution combines highly reliable global L-band satellite technology and least cost routing for automatic switching between satcom, LTE and Land Mobile Radio without user intervention. The system uses just a single handheld microphone, making it incredibly user friendly for fire fighters, who can just pick up and talk without thinking about which service the conversation is being transmitted on. Additionally, the least cost routing ensures costs are kept to the absolute minimum, making it a highly viable solution for public funded services.

Spacecom'S AMOS-17 First Pre-Launch Agreement Goes To Cobbett Hill

March 7, 2018 - Spacecom, operator of the AMOS satellite fleet, announced that Cobbett Hill Earthstation has entered into a long term agreement for C-Band capacity covering the Sub-Sahara region on the AMOS-17 communication satellite. Scheduled for launch in Q2 2019, AMOS-17 is specifically designed for meeting the growing demands of the African continent. With extensive Ka-band, Ku-band and C-Band HTS services, the satellite will combine broad regional beams and high throughput spot beams to maximize throughput and spectral efficiency from the 17°E orbital position. Cobbett Hill Earthstation Ltd., a leading UK independent teleport, will use the capacity on AMOS-17's C-band transponders to provide HTS-based internet, voice, data and broadcast services to the growing Sub-Sahara communication markets.

Panasonic Avionics and APT Mobile Satcom Bring Announce XTS Mobility Offering

March 8, 2018 - Panasonic Avionics Corporation (Panasonic) and APT Mobile Satcom Limited (APSATCOM) announced a major evolution in connectivity for mobility markets – Extreme Throughput Satellite (XTS) service. APSATCOM is an affiliate of APT Satellite Company Limited (APT), the operator of the APSTAR satellite constellation. With this new satellite, the companies are building on a long-standing and successful capacity relationship. The new satellite, APSTAR-6D, gives Panasonic the capacity to meet the needs of its customers and to position itself for sustained growth in the region. APSTAR-6D was jointly designed by APSATCOM and Panasonic to best serve Panasonic's connectivity customers. It is tailored to put capacity where it is most needed, rather than spread evenly over the Earth. APT has provided technical support in design and project management, and will provide satellite operation after launch. This XTS satellite will provide Panasonic customers with multiple gigahertz of new Ku-band capacity over China and high-density routes around East Asia including Tokyo, Seoul, Beijing, Shanghai, Hong Kong, Malaysia, Singapore and Indonesia using narrow XTS spot beams.

Viasat Phased Array Flat Panel Antenna Selected by SES Networks for the O3b mPOWER System

March 8, 2018 - Viasat Inc. announced that its solid-state, fully-electronic phased array flat panel antenna has been selected by SES Networks for the O3b mPOWER satellite communications (satcom) system. The

Viasat flat panel antenna will be used for a new generation of customer edge terminals for multiple applications on the O3b network. Viasat's flat panel antenna technology leverages years of commercial innovation and research and development (R&D) investment. The antenna offers a compact, lightweight solution for fixed and mobile broadband terminals. It is scalable, customizable and will enable SES Networks to target various types of users with different broadband connectivity needs.

SES Networks Announces Partnerships for O3b mPOWER Customer Edge Terminals

March 8, 2018 - SES introduced ALCAN, Isotropic Systems and Viasat as new technology partners for O3b mPOWER, SES Networks' groundbreaking satellite-based communications system. The three companies have been contracted by SES to develop smart, high-throughput terminal solutions, a building block in the system's ground infrastructure innovation roadmap. Developed with leading technology partners, O3b mPOWER Customer Edge Terminals (CET) will combine innovative steerable antenna technology with functionality spanning modem, networking and edge compute capabilities. ALCAN, Isotropic Systems and Viasat each have unique, innovative and alternative approaches for the antenna technology, enabling SES Networks and its O3b mPOWER ecosystem with the best possible solutions for its customer market needs. This development strategy plays a critical role in making it faster, easier and more affordable to expand service reach for both SES Networks and its customers in the dynamic mobility, fixed data and government markets.

Intellian to Introduce GX Mediator, a Dual Antenna Solution

March 8, 2018 - Intellian, the world's leading provider of stabilized satellite antenna systems, is launching its Inmarsat approved GX Mediator. At the heart of this solution is Intellian's GX Mediator, a device that takes care of switching between two GX antennas allowing for seamless coverage by mitigating blockage. This solution is ideal for ships that require the highest levels of availability and security at sea. With the GX Mediator, a ship may install and use two identical GX antennas and use them with a single service package. Both antennas receive the satellite signal, with one antenna designated as the primary and the other taking the role of secondary. If the connection of the primary antenna is degraded, the GX Mediator will automatically and seamlessly switch to the secondary antenna, without user intervention and with no loss of connectivity. In this way, users can maintain a strong and uninterrupted connection to their critical data infrastructure, no matter the conditions at sea or in port.

Altice Portugal Selects Gilat to Support Backhauling to Critical Communications

March 8, 2018 - Gilat Satellite Networks Ltd. announces that Altice Portugal selected Gilat's multi-application SkyEdge II-c platform to provide satellite backhauling for critical communications. Gilat's VSATs will be deployed to back up Altice Portugal critical communications infrastructure covering most of the country. The deployment at Altice Portugal will demonstrate yet again that Gilat's SkyEdge II-c is a truly multi-application high performance and cost effective platform, which has been deployed worldwide for a variety of demanding communication needs that are all served from a single platform.

Globalsat Group Signed an Agreement with Iridium to become a Certus Launch Partner

March 8, 2018 - Globalsat Group has signed an agreement with Iridium Communications Inc. which establishes the consortium as a global Iridium Certus Launch Partner, effective immediately. Iridium Certus is an upcoming generation of advanced IP-based services made available globally thanks to Iridium's new LEO (Low Earth Orbit) satellites, which are currently replacing the Iridium constellation and known as Iridium Next. Through a unique multi-country presence with emphasis on local expertise, regulatory compliance and user-oriented business practices, Globalsat already plays a key role in market access for Iridium services and hardware. Since Globalsat is also a Cobham Satcom and Thales partner clients can benefit from simple turnkey offerings which include both service airtime and terminal hardware. Present clients will be able to transit a seamless upgrade path to Iridium Certus and new clients will have full access to current and upcoming technologies with straightforward business propositions directly through Globalsat.

Isotropic Systems Partners with VT iDirect to Create First Self-installing, Multi-beam, Multi-modem Next-generation Terminal

March 9, 2018 - Isotropic Systems, the next-generation satellite terminal provider, announced a partnership with VT iDirect to create a first-of-its-kind satellite ground terminal with integrated modem technology designed to deliver broadband connectivity for a wide range of consumer and enterprise applications. The agreement with VT iDirect, as the leading modem technology provider for fixed and

mobility markets, and Isotropic Systems' disruptive optical technology and market-focused plan will create a revolutionary shift in the industry to unencumber high-throughput satellite (HTS) broadband. Isotropic Systems' transformational technology will enable the first low-cost, fully electronic tracking terminal that can deliver satellite broadband to previously non-addressable markets. As part of the partnership, Isotropic Systems will integrate an iDirect board level modem that is compatible with Isotropic's integrated modem bays for a fully integrated terminal offering.

Globecomm Roam Delivers a Smart Source of Maritime Connectivity

March 9, 2018 - Globecomm, one of the leading providers of maritime connectivity services has launched Globecomm Roam, providing high throughput, low cost cellular communications in more than 140 countries. Offering 3G, 4G and LTE services at speeds of up to 100 Mbps but at prices much lower than traditional satellite services, Globecomm Roam bundles a cellular modem, global roaming SIM card and maritime antenna to enable connectivity up to 30 miles from shoreside cell towers. Globecomm Roam has been engineered to interface with Globecomm's Nimbus network management smartbox, providing seamless switching between satellite and cellular services. Users of L-Band systems can take advantage of the much lower cost of cellular communications, while VSAT users can use cellular connections in cases of 'line of sight' interruptions while in port or near shore, with much higher throughput than L-Band and much lower connectivity costs.

NovelSat Introduces Capacity Allocation Solution for Point-to-Multipoint Satellite Networks

March 9, 2018 - NovelSat, a world leader in satellite transmission technology, announced the availability of NovelSat LIBRA, a new satellite network management engine that seamlessly provides real-time space segment capacity allocation without remote terminal disconnection or data loss. NovelSat LIBRA is based on SCPC architecture and a suite of NovelSat hardware and software that is optimized for Point-to-Multipoint satellite networks. This solution is designed to help satellite network operators ensure the best user experience in applications including IP trunking, cellular backhaul, oil & gas, military, maritime and homeland security. SCPC-based satellite network architecture delivers guaranteed bandwidth, with low latency and low jitter, from a hub to multiple remote sites. These are necessary benefits for meeting Service Level Agreements (SLAs) in real-time applications such as VoIP, video conferencing, broadcast and Internet services. SCPC, however, leaves bandwidth unused when remote links are not fully loaded or are offline. On the other hand, TDMA-based networks offer more efficient satellite bandwidth utilization, but without the quality of SCPC.

mu Space, SES Networks and Hughes to Provide Broadband Access to Rural Thailand

March 12, 2018 - SES Announced that Rural communities of Thailand will soon be able to enjoy reliable satellite-based broadband services delivered by mu Space Corp using SES Networks' satellite capacity and the JUPITER™ System from Hughes Networks Systems (Hughes). mu Space is a Thai space technology startup which aims to provide satellite services that are affordable, easy-to-install and offer widespread coverage. By contracting capacity on SES satellites – SES-8 and SES-12 once it is launched – and using the Hughes' JUPITER System, mu Space will be improving quality of life for Thailand's citizens by providing reliable and affordable satellite-based broadband for telecom providers and businesses in Thailand.

CPI Antenna Systems Division to Buy Viasat's Large-diameter GEO Satcom Antenna Product Line

March 12, 2018 - The Antenna Systems Division (ASD) of Communications & Power Industries LLC (CPI) announced it has signed an agreement to purchase the limited-motion satellite antenna family from Viasat. CPI ASD will acquire Viasat's 6m to 18m multi-band antennas, providing a valuable extension of CPI ASD's larger-diameter antenna product line, while enabling Viasat to focus on antenna and communications technologies for the growing broadband services market. The purchase price for the antennas was not disclosed. Per the agreement, Viasat will transfer a range of limited-motion antennas at sizes including 6m, 7.3m, 9.1m, 11.3m, 13.5m and 16/18m, plus a 3.9m truck-mounted antenna, all designed for multi-band operation at C, Ku and DBS frequency bands. These products will be integrated into the CPI ASD satcom product line, which currently extends from nomadic 2.5m antennas up to 9.4m multi-band earth stations. CPI ASD will manufacture the large-diameter antenna products at its facilities in Whitby, Ontario, Canada.

VT iDirect Expands iQ Remote Portfolio

March 12, 2018 - VT iDirect announced it is extending the iQ Remote portfolio with three new series: the iQ 200, the iQ 800 and the iQ 1000, which will deliver higher throughput rates and advanced features for

enterprise, telecommunication, aerospace, maritime and land-mobility markets. The iQ Series is VT iDirect's next-generation DVB-S2/DVB-S2X remote portfolio that features unprecedented performance and meets the needs of both fixed and mobility networks across desktop, rackmount and board-level form factors. The iQ 200 Series is planned for cost-effective enterprise and maritime applications, bringing the right combination of speed and efficiency to satisfy the need for higher throughput applications, spurring growth markets such as fishing, small vessels, and offshore applications. Both the iQ 200 and iQ 800 Series remotes are targeted for delivery in 2018.

Inmarsat Partners with Isotropic Systems in Technology Development Agreement for a Next-generation Ka-band Mobility Antenna

March 12, 2018 - Isotropic Systems, the next-generation satellite terminal provider, has engaged in a strategic technology development agreement with Inmarsat to develop a state-of-the-art, all electronic scanning antenna for potential use with Inmarsat's growing constellation of high-throughput Global Xpress satellites. The partnership shows Inmarsat's confidence in Isotropic Systems' disruptive optical array technology and its market-focused business plan to expand the range of future mobility applications supported by the global high-throughput satellite (HTS) capacity now delivered by Inmarsat's Ka-band Global Xpress network. Isotropic Systems' transformational technology will produce a next generation low-cost, fully electronic tracking terminal that will allow Inmarsat to extend its reach into new market sectors. Inmarsat is working with Isotropic Systems to develop a range of terminal solutions to further enable the company's network of channel partners.

ViaSat-2 Satellite Communications Services Available for Military Applications

March 12, 2018 - Viasat has announced the availability of ViaSat-2 satellite communications (SATCOM) service for government, defence and military applications. The service leverages the world's most advanced communications satellite, ViaSat-2, along with innovations in ground networking technologies, that will deliver significant performance advantages over any other commercial or U.S. Department of Defence (DoD) SATCOM system. In early March 2018, Viasat conducted a ViaSat-2 SATCOM system demonstration – attended by representatives from the U.S. armed forces – and showed a number of cloud-based government applications. The speeds on the ViaSat-2 satellite system demonstrated the industry's fastest broadband connections, exceeding 100 Mbps during the demonstration day. The ViaSat-2 satellite system validates the performance advantages and capabilities of Viasat's commercial satcom system today with a glimpse into the Company's ViaSat-3 satcom system capabilities. Viasat's satcom network delivers more bandwidth and better resilience, redundancy and active cyber protection required to maximize operational performance in the contested environments military operations face during combat.

Gilat Launches Complete Dual Band Aero Terminal for Commercial In-flight Connectivity

March 12, 2018 - Gilat Satellite Networks has launched AeroEdge 6000, a highly efficient, high performance terminal for commercial in-flight connectivity. The dual-band terminal includes Gilat's Ku/Ka band antenna, MODMAN, and Wavestream transceivers. The AeroEdge 6000 high performance terminal operates in both Ka and Ku band providing aeronautical broadband satellite communication for high-speed Internet and multimedia applications. The terminal includes Gilat's ER 6000-A Ku/Ka antenna, SkyEdge II-c Taurus MODMAN, Ku/Ka Antenna Networking Data Unit (KANDU) and Wavestream's Ku/Ka Radio Frequency Unit (KRFU). The terminal allows seamless transition between Ka-band coverage and Ku-band coverage thus utilizing the best available satellite resources for cost-efficiency and performance. In support of a high quality passenger experience, the Taurus MODMAN is equipped with a full set of embedded protocol optimization and application acceleration features.

Globecomm Deploys the First Phase of its Rural Connectivity Programme with Avanti

March 13, 2018 - Avanti Communications Group and Globecomm have announced a Master Services Agreement. Globecomm will utilise Virtual Network Operator (VNO) services from Avanti's HYLAS 2 Ka-band satellite which covers Europe, the Middle East and Africa. The VNO services will enable Globecomm to provide satellite connectivity to underdeveloped regions. The initial deployment brings highly reliable and fast satellite broadband to over 250 unserved villages in the Middle East and is the first stage in Globecomm's strategy to connect rural and remote villages to facilitate commerce, education and government support programs. During phase 2 of the initiative, Globecomm plans to further expand the service across the Middle East and East Africa within the next 12 months and has a vision to roll-out a further 2000 connections using Avanti's High Throughput Satellite technology.

Hughes Enhances JUPITER System

March 13, 2018 - Hughes Network Systems announced enhancements to its JUPITER System across the full spectrum of offerings, including doubling the throughput of HT2xxx terminals to over 200 Mbps, expanded and enhanced support for maritime applications and a Rapid In-route Parsing and Prioritization Scheme for fast HTTPS browsing. The new enhancements also include a significant throughput speed increase for the JUPITER Aero System, which supports over 600 Mbps to each aircraft. These enhancements further raise the performance and operational advantages of the JUPITER System, the world's most widely deployed High-Throughput Satellite (HTS) platform which is currently deployed on over 20 satellites across the world and powering a wide range of enterprise and consumer services by leading providers.

The World's Largest Cruise Operator Leverages Intellian's Latest 2.4 Meter Antenna Systems

March 14, 2018 - Intellian has announced that Carnival has installed Intellian's v240MT next generation tri-band and multi-orbit 2.4 meter antennas on-board several Carnival cruise ships enhancing the connectivity experience. In the cruise sector, there is a real demand for innovative antenna technologies that can enable and support intense data-rich applications. In a world's first, Intellian's antennas will provide the Carnival cruise ships with seamless, high-speed connectivity that can truly power the cruise vessel's connectivity demands. Intellian's v240MT (2.4m) antennas, combined with the new Intelligent Mediator Solution, are specifically designed to deliver data rates exceeding 1 Gbps. This extraordinary level of performance, essentially giving passengers the same connectivity speeds they enjoy at home, has previously never been realized at sea. Intellian's 2.4m class multi-band, multi-orbit MEO (Medium Earth Orbit) and GEO (Geostationary Earth Orbit) broadband antennas, unlock access to virtually any satellite constellation within seconds. These frequency-agnostic and orbit-agnostic capabilities, enabled by Intellian's innovative antennas and Intelligent Mediator Solution, ensure that the equipment's capabilities are future-proof to customers seeking the fastest and most reliable broadband connectivity.

AFT and SES Networks Bring High-speed Connectivity to Businesses in Africa

March 14, 2018 - Atlantique Future Technology (AFT), one of the leading service providers of innovative wireless connectivity and broadband network services in West and Central Africa, is partnering with SES Networks to bring cutting-edge end-to-end connectivity service to enterprise customers and households in Niger and Burkina Faso. Enabled via the high throughput low latency O3b Medium Earth Orbit (MEO) satellite fleet, the connectivity solution will allow local Internet Service Providers and Telcos to deliver high speed Internet and application access to their customers in urban and remote locations.

Hughes Selected to Provide Next Gen Rapid Deploy Communications Hub

March 14, 2018 - Hughes Network Systems has been awarded a contract to provide its new HT2900 Rapid Deploy Communications Hub to one of the world's largest oil field services providers. The new HT2900 represents the next generation of the Hughes Ruggedized Transportable product line, and it is designed to be a full communications hub ideal for connectivity in remote locations. The base model supports Ka-, Ku- and L-band service with self-pointing satellite connectivity for both Hughes High-Throughput Satellite (HTS) and mobile fleet services. The base model also includes a Hughes HR4700 Secure SD-WAN Gateway and an industrial grade Wi-Fi access point. The HR4700 provides full security, UTM and Hughes ActiveTechnologies™ for optimized IP network communications. An optional 4G/LTE modem can be added to increase connectivity options when appropriate.

Global Eagle Entertainment Expands Aero Network from Hughes

March 14, 2018 - Hughes Network Systems, LLC and Global Eagle Entertainment announced two major enhancements to Global Eagle's global connectivity network that bring more capacity and faster speeds to airlines and their passengers. First, the Hughes JUPITER aeronautical system is being deployed to support continued expansion of Global Eagle's airline connectivity customers worldwide, and the second is a continued expansion of the network in North America. Global Eagle's adoption of the Hughes JUPITER Aero system allows Global Eagle airline customers and passengers to receive the highest speeds in the industry while at the same time enjoying improved operating economics. The JUPITER Aero system delivers extremely fast and consistent beam and satellite times. Together these attributes enable a superior user experience. Global Eagle's first deployment of the Jupiter Aero system will be in support of international airline routes, with plans to expand.

LeoSat and Phasor Reach Strategic Agreement to Mission Critical Enterprise Networks

March 14, 2018 - Phasor and Low Earth Orbit (LEO) satellite constellation operator LeoSat have

announced a milestone strategic agreement to serve a broad range of mission-critical enterprise network markets with an ultra-high throughput, low latency network infrastructure solution. As part of the collaborative alliance, Phasor will develop a powerful Ka-band, Non-Geosynchronous (NGSO) -ready version of its breakthrough low-profile ESA, scalable to virtually any use-case requirement. Phasor's LEO-capable antenna technology will enable corporations, governments and other high-end users to access a network offering speeds about 1.5 times faster than terrestrial fiber in combination with high-throughput, ultra-security and very low latency. LeoSat, which is launching a unique, laser-linked constellation of up to 108 low-earth-orbit (LEO) communications satellites, will provide gigabit-per-second connectivity speeds to solve essential communications challenges in mission-critical communications sectors such as multinational enterprise, financial, oil and gas, maritime, and government networks.

Spacecom and hiSky to Offer Affordable Voice, Data and IoT Services over Amos-17 Satellite

March 14, 2018 - Spacecom operator of the AMOS satellite fleet, and hiSky Ltd, a provider of affordable satellite-based voice and data communications, announced a cooperation agreement to provide affordable, low-capacity voice, data MSS (Mobile Satellite Services) and satellite IoT (Satellite Internet of Things) services in the Middle East via AMOS 17's Ka-bands and hiSky's newly developed Smartellite family™ satellite terminals. Using AMOS-17's Ka-band beams, hiSky's Smartellite Family solution includes a compact portable SIoT device based on Electronically Steered Antenna (ESA) technology, to provide low data rate services for various applications such as connected vehicles, trains, the energy and agricultural sectors in remote areas.

C-COM Ka-band Antennas Authorized for Operation on HughesNet Gen5 Platform

March 15, 2018 - C-COM Satellite has announced that its iNetVu® vehicle mount Ka-band antenna system, model Ka-98H/JUP, has received type approval from Hughes Network Systems (HUGHES), for operation on its HughesNet™ Gen5 platform powered by Hughes JUPITER™ System Technology. The new antenna operates in Ka-band but is field upgradable to Ku-band, making it ideal for Broadcasters, Oil and Gas Exploration companies, Telemedicine, First Responders, as well as governments and military.

New Speedcast Navigation as a Service™ Streamlines Vessel Technical Management

Mar 15, 2018 - Speedcast International Limited is partnering with SRH Marine to provide Maritime vessels with Navigation as a Service (NaaS), a simplified electronic distribution of electronic navigational charts and updates. Speedcast NaaS is powered by Speedcast's SIGMA Gateway platform and SRH Marine's Pilot. The Maritime world is becoming increasingly digitalized and Speedcast Navigation as a Service will simplify the delivery of electronic navigational charts and updates to assist navigation across the oceans. Speedcast Navigation as a Service, with its remote monitoring and data analytics capabilities, brings Maritime navigation into the digital age and will enable simpler eNavigation regulatory compliance. Speedcast NaaS is available through Speedcast's SIGMA Gateway and SIGMA Xtreme and requires no additional hardware. This announcement furthers Speedcast's increased focus to streamline operations and provide an exceptional customer experience. With 1,300 employees, customers in more than 100 countries, more than 250 field engineers globally and four 24/7 worldwide customer support centres, plus a few regional ones, Speedcast is changing the way customers see remote communications providers.

Cobham Reveals the Engineering behind ELGA Class 4 Antennas

March 15, 2018 - Cobham SATCOM has been highlighting the engineering breakthroughs behind its most technologically advanced terminals, the next-gen Inmarsat Class 4 AVIATOR S series and AVIATOR UAV 200, at Satellite 2018. Cobham is the supplier of the only Inmarsat SB-S approved satellite communications systems currently flying, after developing the first Enhanced LGA (ELGA) antennas that meet the gain requirements to operate over the full Inmarsat hemisphere. To create the first Class 4 Inmarsat terminals, Cobham designed a simple to manufacture, radiating structure, which allowed spreading of excessive gain at boresight down to the lower elevations. Previously, the only low gain antennas on the market typically consisted of helix radiators, offering low gain from antenna boresight down to about 20 degrees above the horizon, which did not cover the full Inmarsat hemisphere down to 5 degrees above the horizon. For the advanced AVIATOR S system, Cobham developed the very compact HELGA (combined HLD and Enhanced LGA) antenna, which contains an ELGA antenna as well as a DLNA function and High Power Amplifier (HPA), all in one package.

Isotropic Systems' Self-installing Consumer Broadband Terminals to Extend in Afghanistan

March 16, 2018 - Isotropic Systems, the next-generation satellite terminal provider, has entered into an

agreement with Neda to develop self-installing, all electronic scanning terminals to extend its single channel per carrier (SCPC) broadband capabilities across Afghanistan for enterprise, government and consumer users. Isotropic will supply Neda with an 'out of the box' consumer web experience that eliminates the need for skilled installation, and allows for remote repointing to alternative satellite capacity services when required. The deal with Isotropic Systems demonstrates Neda's commitment to innovation in Afghanistan to provide world-class connectivity in the region.

Comtech Awarded Multi-year Contract for Advanced Location Services Platform

March 20, 2018 - Comtech Telecommunications Corp. announced that during its third quarter of fiscal 2018, its Enterprise Technologies group, which is part of Comtech's Commercial Solutions segment, has been awarded a \$10.1 million multi-year contract from a major U.S. mobile network operator for its hosted, advanced location services platform. The order includes development, deployment, and support. The Comtech platform leverages its Position Determining Engine (PDE) to deliver precise location information of devices for applications such as turn-by-turn navigation, family finder, and remote workforce management. Secure and completely standards-based, the solution is hosted outside the operator's network and ensures interoperability across all device providers.

Signalhorn Selects LeoSat for Next-Generation Data Network

March 20, 2018 - LeoSat Enterprises has entered into an agreement with Signalhorn, a leading provider of hybrid network solutions for Enterprise and Government customers worldwide. With the ever-growing demands of managing Big Data and Cybersecurity, global enterprises and governments now, more than ever, need instant infrastructure from anywhere to everywhere which is fast, secure and reliable. LeoSat's system of low earth orbit communications satellites can achieve lower latency and stronger end-to-end security compared to traditional satellite and terrestrial solutions used today. This is achieved through an advanced and unique system architecture utilizing optical inter-satellite laser links which connect the satellites, creating fiber-like symmetry at Gigabit speeds while providing total security as the data is encrypted and secured from end-to-end across the network, with no terrestrial touch points.

INTEGRASYS Introduces Alusat, Powerful Remote Maintenance Product for VT iDirect Customers

March 21, 2018 - VT iDirect, Inc. announced that INTEGRASYS, a development, engineering and integration company specializing in the telecommunication and broadcasting markets, has launched its award-winning Always Up Satellite Terminal (Alusat) product, an automated very-small-aperture terminal (VSAT) tool that helps to enhance virtual network maintenance after installation. Alusat, which won "Teleport Technology of the Year" from the World Teleport Association (WTA) during Satellite 2018, allows service providers to monitor sites, ensuring that VSAT terminals continue to operate efficiently after installation, and identify those not functioning properly. This enables service providers to optimize their operation and respond to malfunctions more efficiently, bringing about time and cost savings in operational expenditure.

Comtech Receives Contract for MTTS Deployable Troposcatter Equipment

March 21, 2018 - Comtech Telecommunications Corp. announced that during its third quarter of fiscal 2018, its Orlando, Florida-based subsidiary, Comtech Systems, Inc., which is part of Comtech's Government Solutions segment, has received an order totaling approximately \$2.0 million to provide 50 Mb/s tactical troposcatter equipment to a leading supplier to the UAE Armed Forces. The Modular Transportable Transmission System (MTTS) troposcatter terminals purchased will be delivered to the UAE Armed Forces as a proof of concept vehicle to determine how the MTTS fits into their existing military communications scenario. Comtech's advanced 50 MB tropo modem was chosen because of its excellent field record with both international customers and the U.S. Military, as well as the unmatched performance of the Comtech CS67500 modem.

True Digital Park Partners with Mu Space to Run Research Lab for Satellite and Space Technology

March 22, 2018 - True Digital Park, dubbed to become Southeast Asia's largest digital hub, announced its partnership with satellite technology startup mu Space Corp to operate a lab (open lab) that will research and develop satellite and space technology. The partnership will also be the co-innovation opportunities for satellite-based communication services. True Digital Park aims to build a complete ecosystem for startups that enables open innovation and collaboration between Multinational companies, Startups, SMEs, Investors, Universities, and Public Sector. True Digital Park provides four fully integrated spaces, including co-working space, enterprise space, innovation space, and events and business services space. It is under

construction at Sukhumvit 101 and expected to be completed in late 2018. The digital park has an area of 77,000 sqm, making it the largest of its kind in Southeast Asia.

Comtech EF Data Awarded \$1.4 Million Order to Enhance HTS Connectivity Options

March 22, 2018 - Comtech EF Data Corp. was awarded a \$1.4 million infrastructure equipment order from a global satellite operator. The satellite operator will continue to team Comtech EF Data products with its innovative High Throughput Satellite (HTS) options to offer unparalleled price for performance levels to its customer base, which will create new markets while keeping satellite connectivity competitive within international regions with increased terrestrial options. The order specified Comtech EF Data's CDM-760 Advanced High-Speed Trunking and Broadcast Modem. The CDM-760 offers user data rates of over a Gigabit per second and was designed to be the market's most efficient, highest throughput, point-to-point trunking and broadcast modem. The modem leverages 256-APSK modulation, DVB-S2X and bi-directional Adaptive Coding and Modulation operation, which is the most advanced combination of space segment saving capabilities minimizing overhead.

Globecomm to Introduce Fronthaul, Switching, and Backhaul Solutions for 5G Evolution

March 23, 2018 - Globecomm will introduce an integrated solution set of acceleration, optimization, fronthaul, switching, and backhaul capabilities to support the 3G/4G evolution to the emerging 5G standard. Globecomm's solutions enable carriers to extend mobility cost-effectively and profitably into rural, remote, and underserved regions, where the standard fiber-to-the-base-station architecture is challenged. The company has broad experience and expertise in creating and managing hybrid networks that bundle fiber, microwave, and satellite to generate attractive business cases for hard-to-serve markets. These connectivity solutions are complemented with hosted switching that supports CDMA, GSM/UMTS, LTE, and moving forward 5G, and value-added services including CALEA, SMS, and MMS support. Globecomm can provide satellite data offloading and optimization solutions and services to allow mobile network operators the option of creating an overlay data network, during or post LTE rollout, to increase cell site data capacity. Furthermore, the company provides base station and backhaul equipment, connectivity to tier-1 and tier-2 international carriers, and lifecycle support.

Gilat Telecom Launches Portable Satellite Service Using Small, 8kg Terminal

March 23, 2018 - Gilat Telecom (formerly Gilat Satcom) launched a new service for Governments, Armies and Homeland Security agencies, NGOs and other organisations that are operational in areas with little or no network coverage. New and existing customers will be able to buy a Satcube terminal from Gilat Telecom. This weighs just 8kg and can be transported as hand luggage in a plane. It can be taken anywhere on earth and connected to Gilat Telecom's global satellite network. It can be set up by people with no engineering expertise. Users then pay a monthly fee for connectivity with a variety of different packages available. The Gilat Telecom Satcube service provides speeds of up to 20Mbps and uses the Ku-band.

Telstra Continues its Growth in Europe with its Network Expansion and New Hub in Paris

March 23, 2018 - Telstra, a leading telecommunications and technology company, announced the expansion of its business in Europe with the Telstra Programmable Network soon to be available via new points of presence (PoPs) in Frankfurt and Paris in addition to a new office in Paris that will serve as Telstra's hub for Continental Europe. This builds on Telstra's already strong presence in Europe and follows recent investments including the acquisition of UK-based technology services business Company85. The new PoPs will offer flexible and dynamic access to the Telstra Programmable Network, a leading digital platform for enterprise network services built on Software-Defined Networking. The Telstra Programmable Network provides near-real time on-demand connectivity to clouds, data centres and a partner ecosystem through one portal, transforming the traditional networking experience. Businesses with operations in France and Germany will be able to optimise their IT through the automated provisioning of new applications and services, real-time data insights on network usage and consumption-based pricing without the need for significant infrastructure upgrades.

Boeing HorizonX Invests in Australia-based Nanosatellite Communications Startup Myriota

March 26, 2018 - Boeing announced its investment in Adelaide, Australia-based Myriota, an Internet of Things (IoT) startup seeking to revolutionize satellite communications by providing low-cost access to high-value data in remote locations. Myriota developed technology enabling two-way communications between ground-based micro-transmitters and low Earth orbit (LEO) nanosatellites to securely share data over narrow bandwidths. This direct-to-orbit platform enables applications across the logistics, defense,

utilities, agricultural, environmental and maritime industries, where IoT connectivity via traditional means is extremely challenging and expensive. Boeing HorizonX Ventures' investment in Myriota is its first in a company outside of the U.S. and its 10th since Boeing HorizonX was launched in April 2017. Founded in 2015, Myriota builds on the work of its founders with the University of South Australia's Institute for Telecommunications Research. The company's direct-to-orbit technology enables massive-scale, low-cost communications for IoT devices anywhere on Earth.

IEC Telecom Partners with Iridium to Provide Access to Connectivity On-the-Move

March 26, 2018 - IEC Telecom, one of the leading global providers of managed network communication solutions, has announced its partnership with Iridium to deliver its next-generation satellite broadband solution for land-mobile applications. The service is planned for commercial availability in mid-2018. Iridium CertusSM broadband will deliver reliable, global broadband connectivity and high-quality voice service to the land-mobile industry, and IEC Telecom will play a vital role in bringing this service to market by offering easy to deploy, cost-effective, end-to-end solutions for this service. Iridium Certus will create the first truly globally 'connected vehicles,' allowing drivers to maintain capabilities like real-time vehicle tracking and immediate transmission of telematics information, while supporting internet, phone and email requirements. The solution offers a seamless broadband connectivity experience that can be configured to automatically switch between Iridium Certus or local cellular infrastructure.

Iridium and Speedcast Partner to Deliver Next-generation Satellite Broadband Solutions

March 27, 2018 - Iridium Communications announced that Speedcast has signed an agreement to become a land-mobile service provider for its next-generation satellite broadband technology, Iridium Certus. Speedcast joins a world-class group of service providers and will help further expand the Iridium Certus footprint. Designed for on-the-move vehicles, assets and teams, Iridium Certus will support the only truly global communications solution enabling capabilities like real-time vehicle tracking, internet, phone and data transfer, all from one service. Already a global maritime launch partner for Iridium Certus, Speedcast will bring its international network and expertise to the Iridium Certus land-mobile program as well. Specific to the land-mobile market, Iridium Certus will run on the new Thales MissionLINK terminal, ideal for off-the-grid public safety, utility, oil and gas, military and non-government organization applications. Iridium Certus will offer cost-effective, reliable and global L-band satellite broadband communications that can smoothly transition between satellite and cellular connectivity as needed, providing the end user unprecedented flexibility.

Intertrust and Comtech Expand Partnership for Mobile Telcos

March 27, 2018 - Intertrust Technologies and Comtech Telecommunications Corp. announced an expansion of their technology partnership under which Comtech will use Intertrust's PersonagraphTM consumer data platform to power their SpecifixTM data management product line made for mobile operators. Specifix provides automation that securely connects disparate sources of raw data and transforms them into independent identity profiles at scale. Personagraph is a key element of Specifix and provides advanced data rights management and security capabilities that allow operators to control and monetize their data while respecting their users' privacy and complying with privacy laws including GDPR.

Globecomm to Design and Integrate Ka-band Gateway in Mexico for Hispasat Amazonas 5 Service

March 27, 2018 - Globecomm announced a contract with Spanish satellite operator Hispasat to design and deploy a 7.3m Ka-band gateway satellite earth station in Ixtlahuaca de Rayón in Mexico to support high-throughput services via the Ka-band payload on Amazonas 5, which was launched in September 2017. Globecomm is providing design services using proprietary software for RF modeling which, complementing the engineering analysis, will reduce deployment risk. In addition to design and the management of manufacturing, Globecomm provides installation, integration, and testing prior to the start of service in collaboration with its in-country partner, AMFAR. The gateway can be monitored and controlled remotely from anywhere in the Hispasat global network.

C-COM Antenna Receives Acceptance from Optus Satellite Networks

March 27, 2018 - C-COM Satellite Systems Inc., the world's leading designer of commercial grade mobile auto-deploying satellite antenna systems, announced that their iNetVu[®] 981 Driveaway Ku-band antenna system has received approval from Optus Satellite Networks. The iNetVu[®] 981 Driveaway antenna, along with its advanced 7710 auto-acquire controller, completed the approval process with repeated Cross-Pol tests of better than 36dB, including one test at 40dB, which are indications of an antenna with formidably

high accuracy and stability. The acceptance tests were completed by C-COM's dealer partner Gateway Teleport, headquartered in New Zealand.

Kleos Space Sets up Australian Subsidiary in Canberra European Space Startup

March 29, 2018 - Kleos Space has opened its first overseas sales and business development office in Canberra. The Australian subsidiary will be tasked with developing the broader Asia Pacific market. Luxembourg-based Kleos has previously announced plans to list on the ASX later this year. It intends to launch and operate its first earth observation satellite system in early 2019. Earlier this month, it signed a \$3.5 million contract with GomSpace to deliver the first of a planned 20 satellite constellation. The company sees Australia as a potentially strong market for its services, particularly among government agencies. It has also noted federal government funding of \$500 million for space-based intelligence, surveillance and reconnaissance capability. Former ADF member Erik Tyler has been appointed MD to lead the regional subsidiary. Kleos was spun off from UK-based parent company Magna Parva and has had backing from the Luxembourg government, the UK Ministry of Defence, the European Space. Geoff Long, Commsday

BROADCASTING

AsiaSat Expands Top Quality News Offerings with Launch of Channel NewsAsia HD on AsiaSat 7

March 1, 2018 - AsiaSat announced that Channel NewsAsia has upgraded the quality of its regional broadcast distribution from standard definition (SD) to a full 24-hour High Definition (HD) channel, delivered via AsiaSat 7. Over the past two decades, Channel NewsAsia – which is owned and operated by Mediacorp – has become a household name in the region for its breaking news, current affairs programmes and documentaries told through a uniquely Asian perspective. The channel which started in Singapore in 1999, first aired across the region in SD on AsiaSat in 2003, and by end March 2018, this SD service will be completely replaced by the HD channel. Distributed exclusively free to air on AsiaSat 7 in C-band, Channel NewsAsia is currently viewed in more than 28 territories across the Asia Pacific via its extensive network of terrestrial and pay TV affiliates, and partner hotels. Having joined AsiaSat's expanding list of HD news channels, Channel NewsAsia is in the best position to reach a wider international audience with its enhanced broadcast-quality content thanks to AsiaSat 7's comprehensive footprint.

APSTAR TV App Launched in Apps Market

March 2, 2018 - APT Satellite Company Limited (APT Satellite) announced formal launch of APSTAR TV App download for Android and iOS. The App, namely "APSTAR TV" provides live-streaming for a variety of TV channels, as well as their time-shift recordings for seven days. By using "APSTAR TV", media customers' TV channels can broadcast both on APSTAR satellites and on mobile devices simultaneously. APSTAR TV is available on the market for all Android and iOS users, download, installation and use are free for the time being. Daily video recommendations are updated in Wechat account "APSTAR-TV", and Facebook account "facebook.com/apstar.ott/".

India's TV Today Network Chooses Harmonic Ultra-Low-Latency Contribution Solution

March 5, 2018 - Harmonic announced that TV Today Network, a leading breaking news channel in India, has deployed a comprehensive contribution and distribution (C&D) solution from Harmonic for DVB-S2 digital satellite newsgathering. India is driving the growth for pay-TV broadcasters in the Asia-Pacific region, accounting for 65 percent of the regional revenue, according to new research from Media Partners Asia (MPA). Using Harmonic's ViBE® CP3000 contribution encoders and ProView™ 8100 integrated receiver-decoders (IRDs), TV Today Network can take advantage of the burgeoning revenue opportunities by capturing pristine video at the front end of the broadcast chain and delivering it over satellite with ultra-low latency. A cornerstone feature of Harmonic's C&D solution is low-latency encoding, which helps eliminate awkward pauses during handoffs between TV Today Network's field and studio talent.

Eutelsat and Globecast Set to Launch New Media Platform over the Americas

March 7, 2018 - Eutelsat Communications and Globecast announced they are partnering on a new media platform over the Americas. The new platform launched by both companies will allow broadcasters across the Americas to gain access to Globecast's advanced media management solution designed for both linear

television distribution and new media technologies, including streaming, local ad insertion, IoT services, HEVC encoding and regionalization services. This distinctive capability will be provided from Globecast's Culver City, CA teleport to Eutelsat's EUTELSAT 117 West A satellite at 117° West, a prime mid-arc video neighbourhood serving the Americas from Alaska to Argentina. A unique feature of the platform will be the ability to provide fleet protection and redundancy via the EUTELSAT 113 West A satellite. Located just four degrees away with the same transponder plan and polarization, and combined with Eutelsat's dual-feed CATV upgrade programme for cable operators throughout the Americas, this two-satellite solution will offer enhanced protection and restoration capabilities for programmers.

SES Optimizes Events and News Broadcasting with New Product "OU Flex"

March 7, 2018 - SES unveils a new product, "OU Flex", which is designed to enhance Occasional Use services. While supporting live video distribution as a priority, the OU Flex solution also provides high-quality IP connectivity to enable the simultaneous use of multiple data applications - including connections to a corporate network, emails, web browsing, video file transfer, as well as feeding live video content to social media, or streaming live video content in high-quality online. OU Flex transforms the traditional one-way feed for video broadcast into a two-way connection between the site and the studio, providing more flexibility to broadcasters and SNG (Satellite News Gathering) operators to facilitate remote production and distribute video content to online platforms. Working in collaboration with Newtec, a specialist in designing, developing and manufacturing equipment and technologies for satellite communications, the OU Flex solution integrates the Newtec Dialog platform, which enables SES to deliver dedicated, reliable connections to broadcasters for video and data transmissions. By allocating bandwidth dynamically, SES can provide high throughput, seamless connectivity, regardless of the number of reporters and users relying on the network at the event.

DELTA Selects Irdeto to Protect new IPTV Set-Top Box

March 8, 2018 - Irdeto, the world leader in digital platform security, today announced it will provide security solutions and services to DELTA as it rolls out a new all-IP service in The Netherlands. Part of the Irdeto 360 Security suite, Irdeto Cloaked CA will enable DELTA to securely deliver premium pay TV content to its subscribers through DVB and IP channels. DELTA will be one of the first cable operators to offer an all IP set-top box service in The Netherlands. To provide the secure IPTV service, Irdeto partnered with Amino who are providing DELTA with a full end-to-end solution to deliver multiscreen entertainment services. Irdeto Cloaked CA is a key solution offered in the Irdeto 360 Security suite, which is designed to ensure future-proof end-to-end security that can quickly and easily react to changes in the market in a cost-effective fashion. By partnering with Irdeto, DELTA ensures that its offering continues to provide the highest level of security as required by content owners and confirming its position as a leading TV operator in The Netherlands. Irdeto is the leading supplier of software CA and continues to invest in Cloaked CA. Irdeto has over 70 Cloaked CA customers globally with more than 31 million deployed client devices.

SPI /FILMBOX Partners with MEASAT to Pursue International Expansion across Asia-Pacific

March 12, 2018 - SPI International / FILMBOX, a rapidly-expanding global media company, has signed a multi-year agreement with MEASAT Satellite Systems Sdn. Bhd. ("MEASAT") to distribute six 24 hour TV channels including one Ultra HD channel across the Asia Pacific region. SPI International gains access to MEASAT's 91.5°E hotslot with an established video neighborhood and strong affiliate base across wide geography comprising of Asia Pacific, Australia, Middle East and parts of Africa. Broadcasting its premium content to cable operators and DTH providers, SPI will broadcast these worldwide thematic channels: FightBox HD, a 24/7 sports network with live international MMA events, DocuBox HD, a documentary channel covering nature, wild life, science and human civilization, Fast&FunBox HD, a lifestyle/sports channel with extreme adrenaline sports programming, FilmBox Art House, a movie channel presenting independent and classic films, Gametoon HD, a new interactive, eSports channel for millennials and FunBox UHD, a general entertainment channel featuring native Ultra HD content.

FashionTv and APT Satellite Cooperate in GWTV

March 19, 2018 - FashionTv cooperates with APT Satellite Company Limited ("APT Satellite") to distribute the Great Wall TV Platform, a 25 TV channel bouquet including some highly-rated TV channels, namely CCTV-Entertainment, Hunan TV, Zhejiang TV, Oriental TV, to hotels around the world, using a combination of OTT and satellite distribution technology to maximize the coverage. APT Satellite started distributing Great Wall TV channels on APSTAR satellite starting from November 2016. This agreement with

FashionTV is very beneficial to the business operation of Great Wall TV in the world. FashionTV has their expertise in establishing comprehensive distribution networks for TV channels all over the world

TVNZ Chooses AsiaSat 5 to Deliver Live Coverage of 2018 Commonwealth Games

March 20, 2018 - Asia Satellite Telecommunications Company Limited (AsiaSat) and Television New Zealand (TVNZ) have collaborated to deliver live coverage of the 2018 Gold Coast Commonwealth Games via AsiaSat 5. This collaboration is integral to TVNZ's extensive plan of providing the largest-ever free to air coverage of the Games in New Zealand and enabling broadcast rights-holders in the Asia-Pacific region to have full access to the event's live coverage and daily highlight packages. The 2018 Commonwealth Games, taking place on the 4th to 15th of April in Australia's Gold Coast, will gather more than 6,600 athletes and team officials from 70 Commonwealth nations and territories. Commonwealth Games coverage by TVNZ, New Zealand's leading free to air broadcaster, will be distributed through AsiaSat 5's wide C-band beam to rights-holding broadcasters in Asia in partnership with the Asia-Pacific Broadcasting Union and TVNZ's sub-licensees in the Pacific region. Event coverage will include the spectacular opening and closing ceremonies, as well as 11 days of live and replayed television action showcasing athletes competing in 18 sports and seven para-sports across 18 sports venues.

THAICOM and CANAL+ Sign Capacity Agreement in Myanmar

March 21, 2018 - Thaicom Public Company Limited announced the signature of a multi-year contract with CANAL+ Overseas Myanmar, the CANAL+ subsidiary in charge of broadcasting internationally and in Myanmar. CANAL+ is part of Vivendi SA, one of the largest media companies based in France. The contract is part of CANAL+ Myanmar's launch of a pay TV DTH service platform. CANAL+ Overseas Myanmar has leased 4 transponders on the Thaicom-6 satellite and broadcast platform on Ku-band that will be used to deliver a new bouquet of initially 80 channels.

LAUNCH / SPACE

e-GEOS and SES to Build New Ground Station in Italy

March 1, 2018 - e-GEOS, a joint venture between Telespazio and Italian Space Agency, and SES are working together to build Matera User Ground Station (MUGS) for the European Data Relay System (EDRS). The MUGS is designed to receive, process and distribute data streams from the EDRS space segments. EDRS serves the EU's Earth Observation Programme Copernicus, which supports urban area management, nature protection, agriculture, health, and civil protection. EDRS is an optical satellite communications system that enables near-realtime data relay from Low Earth Orbit (LEO) satellites to Europe via the geostationary EDRS-A and -C satellites. It is developed under a public-private partnership between the European Space Agency (ESA) and Airbus, through ESA's Advanced Research in Telecommunications Systems (ARTES) programme. The tender for the construction of the MUGS was awarded to e-GEOS by ESA, under ARTES. The project will be managed by ESA and led by e-GEOS as the prime contractor, in close collaboration with SES, who has been selected to design, deliver and test the ground station, and Airbus to build data collection and storage units.

ULA Launches GOES-S Weather Satellite for NASA and NOAA

March 1, 2018 - A United Launch Alliance (ULA) Atlas V rocket carrying the GOES-S mission for NASA and NOAA lifted off from Space Launch Complex-41 on March 1 at 5:02 p.m. EST. GOES-S is the second satellite in the Geostationary Operational Environmental Satellite (GOES)-R series of satellites, which have played a vital role in weather forecasting, storm tracking and meteorological research. ULA's current and heritage Atlas and Delta rockets have launched every GOES satellite, first launching in 1975. GOES-S will be operated from a vantage point 22,300 miles above Earth to cover the western United States, Alaska and Hawaii, providing unprecedented advancements in the clarity and timeliness of observations over the region. It will work in tandem with the GOES-R satellite that was successfully launched by an Atlas V rocket on Nov. 19, 2016. The next-generation GOES-R series scans the Earth five times faster at four times the image resolution, with triple the number of data channels than previous GOES satellites for more reliable forecasts.

JAXA Astronaut Akihiko Hoshide Selected as ISS Expedition Crew Member

March 2, 2018 - The Japan Aerospace Exploration Agency (JAXA), a national research and development agency, announced that JAXA Astronaut Akihiko Hoshide was selected as a crew member of the

International Space Station (ISS) Expedition 64/65. He will be the second Japanese to assume the post of commander on the ISS in leading the 65th Expedition. Selected as a JAXA astronaut candidate in 1999, Astronaut Hoshide was launched as a mission specialist (MS) aboard the Space Shuttle in June 2008 for the second of three missions to deliver the Japanese Experiment Module ("Kibo") to the ISS. In July 2012, he also flew aboard the Soyuz spacecraft (31st launch of crew members to the ISS: 31S), working onboard for 124 days as flight engineer for the ISS Expedition 32/33 mission. The ISS Expedition 64/65 will be the third spaceflight for Astronaut Hoshide.

Action Plan Approved for Next Ariane 5 Launches

March 2, 2018 - After the release of the conclusions of the Ariane VA241 Independent Enquiry Commission on 22 February, the findings and recommendations were formally presented to a Steering Board on 28 February. As stated in the Arianespace press release of 23 February, the direct cause of the trajectory deviation on 25 January was an incorrect value provided to the launcher's two Inertial Measurement Units (IMUs). Given the special requirements of this mission, the azimuth required for the IMU alignment was 70° but the usual value for geostationary transfer orbit missions of 90° was erroneously used instead. This difference led to the 20° shift to the south in the trajectory from the first seconds of flight. The underlying reasons for the direct cause have been clearly identified: a need to strengthen the processes for establishing, verifying and approving the specific operational procedures involving the IMU reference frame. Thanks to the action plan of ArianeGroup and Arianespace, the reliability of the Ariane 5 launch system, which already had an outstanding series of mission successes establishing it as a market leader, will be further increased. The actions will enable the next flight of this heavy-lift vehicle to be made this month.

Successful Launch of Hispasat 30W-6 Satellite

March 6, 2018 - HISPASAT, the Spanish satellite communications operator, successfully launched its twelfth satellite, Hispasat 30W-6, from Space Launch Complex 40 (SLC-40) at Cape Canaveral Air Force Station in Florida atop SpaceX's launch vehicle Falcon 9. From its orbital position at 30° West, Hispasat 30W-6 will replace and broaden the capacity of Hispasat 30W-4. It has 40 Ku-band transponders, up to 6 Ka-band beams and 10 C-band transponders. Hispasat 30W-6 has beams aimed at the Mediterranean, Europe, Spain, northeast Africa and the American continent, it increases the operator's offer in Ka and Ku bands, and incorporates a new C-band beam with Pan American coverage. Hispasat 30W-6 is the fourth satellite of the HISPASAT fleet to be built by Space Systems Loral using its 1300 platform and involved the participation of Spanish companies for the manufacture of several components and development of the ground segment: Thales Alenia Space España, Airbus D&S España, TRYO Aerospace, DAS Photonics, Iberespacio, GMV and Indra.

Lockheed Martin Begins Assembly of JCSAT-17 Commercial Communications Satellite

March 7, 2018 - The assembly, test and launch operations (ATLO) team at Lockheed Martin has started production of a new commercial satellite, JCSAT-17, which will deliver flexible, high-bandwidth communications to users in Japan and the surrounding region. The JCSAT-17 satellite, manufactured for the SKY Perfect JSAT Corporation (SJC), has entered the assembly and test cycle after completing a rigorous design and engineering phase. Built on Lockheed Martin's new advanced LM2100 bus, the satellite's payload incorporates S-band transponders with a flexible processor along with 18m mesh reflector, enabling assured communications continuity during disaster relief efforts and other high-volume events. It will also carry C- band and Ku-band.

Optus Satellite to Begin Testing and Trials on Telesat's Phase 1 LEO Satellite

March 8, 2018 - Optus Satellite and Telesat announced they will be collaborating in live, over-the-air trials on Telesat's recently launched low earth orbit (LEO) satellite. Telesat's Phase 1 LEO satellite was launched in January 2018 and is now undergoing commissioning and orbit-raising. Telesat's LEO constellation, once fully deployed, is designed to deliver transformative, low latency, fiber-like broadband for commercial and government customers throughout the world, including in Australia and New Zealand. Phase 1 testing will enable Optus to experience the advantages of Telesat's system - including ultra-low latency and high speeds - and assess the role Telesat LEO can play in Optus' next-generation satellite networks. Optus and Telesat will work together, using Telesat equipment and existing Optus infrastructure, to perform the testing at the Optus satellite teleport in Belrose, NSW, and at other locations in Australia. Optus and Telesat will also explore a longer-term joint services and market development plan, specific to Telesat's LEO initiative, for Optus' customer segments and regions of interest. Both parties look to leverage their

combined commercial and technical capabilities to transform the communications experience.

Eutelsat Commissions ELO, its First Low Earth Orbit Satellite Designed for the Internet of Things

March 8, 2018 - Eutelsat Communications has commissioned a nano-satellite from manufacturer Tyvak International SRL, a subsidiary of Terran Orbital Corporation, a leading aerospace provider of nanosatellite and microsatellite vehicles and services. Eutelsat LEO for Objects (ELO) will be used to assess the performance of low earth orbit (LEO) satellites in providing narrowband connectivity for objects. The satellite operator will be drawing on the technology of Sigfox, which runs a unique global narrowband network dedicated to the IoT. Low earth orbit is particularly well-suited to narrowband connectivity for objects. It offers a satellite link anywhere in the world, is complementary to terrestrial IoT networks, and does not impact the cost or the energy consumption of the objects. ELO, scheduled for launch in 2019, will backhaul information from objects located in areas that are not served by terrestrial networks and offer redundancy on existing terrestrial network coverage. ELO will also test connectivity in other frequency bands. The synergies developed through the partnership with Sigfox, as well as with other strategic alliances in the telecom industry, should open up new opportunities for Eutelsat in this fast-growing market.

GSA and Thales Launch the EDG²E Project to Further Optimise Aviation Navigation with Galileo

March 8, 2018 - The European Union's Global Navigation Satellite Systems Agency (GSA) has officially launched the EDG²E project (Equipment for Dual frequency Galileo GPS and EGNOS) with a consortium led by Thales. This four-year project intends to develop a dual-frequency multi-constellation receiver, enabling enhanced navigation capabilities, support standardisation and certification preparation. The consortium includes Thales, Thales Alenia Space and ATR, as well as contributions from Dassault Aviation and the French Civil Aviation Authority (DGAC). The GNSS receiver is the cornerstone of aircraft navigation systems. The system processes signals from satellite constellations and the Space Based Augmentation System (SBAS) to accurately determine aircraft position, altitude and velocity. The prototype receiver developed under the auspices of the EDG²E project will use signals from US GPS and European Galileo positioning systems, as well as from SBAS multi-constellation EGNOS. The project aims to achieve a prototype demonstration by 2021. The prototype receiver performance will be evaluated during a flight test campaign performed by ATR using one of the company's test aircraft. Initiated by the European Commission's Global Navigation Satellite Systems Agency (GSA), the EDG²E project will support the launch of the Galileo satellite constellation.

Successful Launch of Four O3b Satellites

March 9, 2018 - SES announced that its four new O3b Medium Earth Orbit (MEO) satellites were successfully launched into space by Arianespace onboard a Soyuz rocket, from the Guiana Space Center in Kourou, French Guiana. Built by Thales Alenia Space, the four new O3b satellites will enable SES to bring more capacity, enhanced coverage and increased performance to market. By augmenting its O3b fleet, SES is scaling its unique ability to connect people, businesses, and continents with high performance communications anywhere on Earth. The O3b constellation is expanding to continue to drive digital equality and to support digital transformation across the globe. The additional capacity will enable SES Networks to cater to the growing consumption of bandwidth in the telecom, cloud, maritime, energy, and government markets. In addition to these four new satellites, another four O3b satellites are scheduled to launch in H1 2019. The first 12 O3b satellites were launched by three Soyuz launch vehicles in 2013 and 2014.

Long March-8 Carrier Rocket to Make Maiden Flight in 2020

March 9, 2018 - The new generation medium-lift carrier rocket, the Long March-8 (CZ-8), is expected to make its maiden flight in 2020, while the heavy-lift carrier rocket with a carrying capacity of over 100 tons on 2030, said Li Hong, director of China Academy of Launch Vehicle Technology (CALT) under China Aerospace Science and Technology Cooperation (CASC) in an interview on March 7. The CZ-8 rocket will fill the gap of Chinese launch vehicles with a carrying capacity between 3 and 4.5 tons on the sun-synchronous orbit, which will add a new member to the carrier rocket family, meet the future demands of commercial rocket launching market on medium and high Earth orbits and push forward the upgrading of current launch vehicles. Periodical success has also been achieved in the key technology of heavy-lift carrier rocket with carrying capacity exceeding 100 tons, Li said, adding that the heavy-lift carrier rocket is expected to make maiden flight in 2030.

ILS and Effective Space Announce Launch of Two Satellite-Servicing Space Drone Spacecraft

March 12, 2018 - ILS and UK headquartered Effective Space announce their intent to contract to deliver two of Effective Space's SPACE DRONE™ spacecraft into orbit. The Proton Breeze M rideshare launch is planned for 2020 from the Baikonur Cosmodrome in Kazakhstan. The ILS Proton Breeze M vehicle with the standard 4 meter payload fairing will launch the two spacecraft into a geostationary orbit. The SPACE DRONE™ spacecraft will then use their onboard propulsion system to maneuver to their contracted life-extension mission locations, as recently announced. The SPACE DRONE™ spacecraft is a 400-kilogram spacecraft (1m x 1m x 1.25m) that has a universal, non-intrusive docking system to rendezvous and dock to the geostationary host satellite. The SPACE DRONE™ spacecraft then uses electric propulsion to take over the station-keeping and attitude-control maneuvers of the joint stack. Missions include station-keeping, relocation, deorbiting, orbit correction, inclination correction and 'bringing into use' (BIU). The ILS Proton Breeze M launch will be the first deployment of Effective Space's SPACE DRONE™ spacecraft in 2020. Planned fleet expansion will see up to six (6) SPACE DRONE™ spacecraft being sent to orbit on an annual basis. Future phases will see SPACE DRONE™ spacecraft being launched to support low Earth orbit (LEO) constellations, Active-Debris-Removal (ADR) and other logistics in space.

mu Space Confirms Satellite Mission aboard New Glenn

March 12, 2018 - mu Space Corp confirmed that they will launch a geostationary satellite aboard Blue Origin's New Glenn orbital rocket. The launch window starts in late 2020. In 2016, Blue Origin announced publicly the plan to build New Glenn, its orbital launch vehicle that will carry people and payloads to low-Earth orbit destinations and beyond. Named after the first American astronaut to orbit the Earth, John Glenn, the launch vehicle is designed to be reusable which enables lower cost access to space for Blue Origin's customers. mu Space is working to support the growing demand for smart homes and smart cars, and development of smart cities in Asia-Pacific, and plans to scale up globally. The company aims to use space technology to accelerate the development and adoption of useful smart applications.

SKY Perfect JSAT and Blue Origin Signed Agreement

March 13, 2018 - SKY Perfect JSAT Corporation announced that the company signed an Agreement with BLUE ORIGIN FLORIDA, LLC for the future use of its new launch vehicle. Expecting the future launches of SJC's communications satellites, for ensuring the wide variety of launch and schedule flexibility, SJC signed the Agreement with Blue Origin for its new launch vehicle, New Glenn.

Open Cosmos Announces Two Space Mission Contracts with e2E

March 13, 2018 - UK-based Open Cosmos has announced the signature of two space mission contracts with satellite communication system provider e2E. As Open Cosmos' first Simple-o (Space Infrastructure & Mission Provider to Low Earth Orbit) programme customer, e2E will benefit from a full space mission to validate its NEATaccess technology and to introduce its Uam® communications managed service offering. This includes two qbee nano-satellite bus, mission design and payload development through the qbapp software-as-a-service platform, payload-satellite environmental testing using the qbkit nanosatellite qualification model, integration and test, launch services, ground segment procurement, regulatory and insurance services, satellite control center, and mission operations. The contract includes the provision of two space missions, the first In-Orbit Demonstration (IOD) mission to space-qualify e2E's NEATaccess radio communications module, shortly followed by an In-Orbit Validation (IOV) mission which will demonstrate its Niche Managed Communications Services (NMCS) being branded Uam®. The two missions will launch in mid-2019 and end 2019 respectively.

Thales Alenia Space, Telespazio and Spaceflight Industries Set up Smallsat Alliance

March 13, 2018 - The Space Alliance formed by Thales Alenia Space and Telespazio announced it has officially taken a minority stake in Seattle-based Spaceflight Industries, having received all government approvals for the transaction. This investment is part of an overall fundraising effort of \$150 million from several sources which include The Space Alliance, existing investors, and Mitsui & Co., Ltd., one of the largest general trading companies in Japan. With this latest funding, Spaceflight Industries has raised more than \$200 million in total capital. BlackSky, the geospatial intelligence company of Spaceflight Industries, is now fulfilling its vision to deploy a high revisit rate earth imaging constellation which, when combined with other space and terrestrial based sensors, will enable delivery of innovative global monitoring solutions and geospatial activity-based intelligence products and services. BlackSky's first four Global next-generation satellites are slated to launch in the next 12 months. This round of funding ensures production and launch of an additional 20 Global satellites which are planned to be in orbit by 2020. These

smallsats will generate revenues that will enable the production and launch of the full 60 satellite constellation.

Orbital ATK Introduces Next Generation of In-Orbit Satellite Servicing Technology

March 13, 2018 - Orbital ATK announced its plan for the company's next generation of satellite life extension and in-space servicing products. Orbital ATK introduced a new robotic servicing system that provides additional options for customers to enhance the value of their satellites. This new space system also enables the company to expand its customer base with advanced mission capabilities in an emerging market that Orbital ATK is pioneering. The new system consists of two products, Mission Extension Pods (MEPs)[™] and Mission Robotic Vehicles (MRVs)[™], which complement the industry's first commercial satellite servicing vehicles, Orbital ATK's Mission Extension Vehicle (MEVs)[™], by providing customers with more flexibility to extend the life and effect repairs to their valuable in-orbit satellite assets.

Kanematsu Partners with Vector Launch to Expand the Availability of Small Launch Vehicles throughout Japan and other Asian Markets

March 14, 2018 - On the heels of its strategic investment in Vector made in January 2017, Kanematsu Corporation ("KG") has entered into an exclusive representative agreement with Vector, a nanosatellite launch company comprised of new-space and enterprise software industry veterans from SpaceX, Virgin Galactic, McDonnell Douglas, Boeing, Sea Launch and VMware, to sell its products and services in Japan and three Asian countries including India, Thailand and South Korea. Based on the execution of this representative agreement, KG will provide customers with services stimulating demand for micro-satellite launch throughout Asia. Despite growing demand in the micro satellite launch market, customers today can only launch these micro satellites using heavy, large launch vehicles, often waiting years for their launch. Vector changes the way companies access space by providing a service dedicated to small satellites that enables customers to launch their 10-150kg class micro satellites into a desired orbit at their preferred timing, at a much lower cost.

DigitalGlobe Selects SpaceX to Launch its Next-generation WorldView Legion Satellites

March 14, 2018 - DigitalGlobe, a Maxar Technologies Ltd. company (formerly MacDonald, Dettwiler and Associates Ltd.), announced it has contracted with SpaceX to launch the next-generation WorldView Legion satellite imaging constellation. The initial block of the multi-satellite WorldView Legion constellation will be launched by two flight-proven Falcon 9 rockets in 2021. The WorldView Legion constellation will incorporate DigitalGlobe's and its parent, Maxar's, most advanced capabilities in Earth observation and satellite construction technologies. It will double DigitalGlobe's ability to collect the world's highest resolution 30 cm satellite imagery and triple the capacity available over the highest-demand regions, while reducing capital investments by half relative to the GeoEye-1, WorldView-1 and WorldView-2 satellites it will replace. The satellites are being developed by SSL, another Maxar company and the global leader in commercial satellites.

SpaceX and ULA Win over Half a Billion Dollars in New Air Force Launch Contracts

March 15, 2018 - The U.S. Air Force awarded rocket launch competitors SpaceX and United Launch Alliance each hundreds of millions of dollars in new satellite contracts, the Department of Defense announced. SpaceX won a \$291 million fixed-price contract to launch a military GPS III satellite by March 2020 aboard a Falcon 9 rocket, with an option included to launch two more. At \$96.8 million per launch, the cost of these latest awards are in line with the two previous GPS III launches SpaceX won in April 2016 and March 2017, for \$87.2 million and \$96.5 million each. ULA, a joint venture between Boeing and Lockheed Martin, won a \$355 million fixed-price contract to launch two Air Force Space Command (AFSPC) satellites. The company will launch one satellite aboard an Atlas V rocket in March 2020 and the other in June 2020.

ILS Secures Additional Launch Orders for Proton Medium Vehicle

March 15, 2018 - ILS has announced multiple launch assignments for Proton Medium launches that will include the use of both the 4.35 meter and the new 5.2 meter payload fairing. The missions will take place beginning in late 2019 from Pad 24 at the Baikonur Cosmodrome in Kazakhstan. The Proton Medium launch vehicle is an optimized 2-stage version of the heritage Proton Breeze M vehicle. The medium class vehicle serves the lighter weight satellites in the 3.5 to 6 Metric Ton range with the capability to launch single, dual or multiple satellites to a variety of orbits. The Proton Medium vehicle utilizes either the 5.2 or 4.35 meter payload fairing with the benefits of the standard, flight-proven Proton Breeze M configuration

and spacecraft insertion history.

Airbus Launches Photonics Payload Technology Project - OPTIMA

March 15, 2018 - Airbus has launched the OPTIMA project, which will deliver a proof of concept demonstrator for the use of photonic payloads in telecommunications satellites. The OPTIMA project, which is led by Airbus Defence and Space in Stevenage and part of Horizon 2020 funded by the European Commission, comprises specialist partners from across Europe, including: DAS Photonics, CORDON Electronics, SODERN, IMEC and Polatis. Airbus Defence and Space will define, assemble and test a photonic payload demonstrator based on the components and equipment developed by the other members of the consortium. Photonic payloads have the potential to revolutionise the design, capacity and capability of future generations of telecommunications satellites. The photonic payloads will use light to transfer the signals throughout the spacecraft, replacing current RF technologies, allowing for the development of more efficient and powerful satellites which are able to meet the increasing complexity and sophistication required by customers. The use of optical fibre based equipment has already transformed Information Technology for ground applications, and its compact, lightweight and low power nature should enable reductions in mass on telecommunication satellites as they replace currently used technology.

Orbital ATK Achieves Significant Development Milestone for NASA's Landsat 9 Satellite

March 15, 2018 - Orbital ATK has been given approval to begin building the NASA Landsat 9 spacecraft after completing a comprehensive design review of the mission. Landsat 9, a land surface mapping satellite, will collect space-based images and data that serve as valuable resources for researchers in areas that include agriculture, land use mapping, and disaster relief. Orbital ATK is designing and manufacturing the satellite, integrating two government-furnished instruments, and supporting launch, early orbit operations and on-orbit check-out of the observatory. Landsat 9 is based on Orbital ATK's flight-proven LEOSTAR-3 spacecraft bus platform, the same that was successfully used on Landsat 8. The Ice, Cloud and Land Elevation satellite (ICESat-2) and the Joint Polar Satellite System (JPSS-2) spacecraft are also based on the LEOSTAR-3 bus platform and currently in production for NASA at Orbital ATK's Gilbert facility.

China Launches Land Exploration Satellite

March 18, 2018 - China launched a land exploration satellite into a preset orbit from the Jiuquan Satellite Launch Center in the Gobi desert of the country's northwest on March 17. The satellite is the fourth of its kind and mainly used for remote sensing exploration of land resources, developed by the China Academy of Space Technology (CAST), a subsidiary of China Aerospace Science and Technology Corporation (CASC). A Long March-2D rocket carried the satellite into space. The launch was the 268th mission of the Long March rocket series.

SpaceDataHighway Starts Full Copernicus Service

March 19, 2018 - The Airbus-operated SpaceDataHighway has begun regularly relaying data from the Sentinel-2A satellite, after the successful end of the commissioning period. This marks the start of the SpaceDataHighway service using all four Copernicus Sentinel satellites and the beginning of a new era for space-based imagery users. The first two sets of Earth-observing Copernicus Sentinels-1A and -1B and -2A and -2B are signed up to this service as SpaceDataHighway's anchor customers under an agreement between the European Union and the European Space Agency (ESA) as owners of the Copernicus programme, and Airbus as the owner and commercial operator of SpaceDataHighway. The SpaceDataHighway is the world's first "optical fibre in the sky" based on cutting-edge laser technology. It will be a unique system of satellites permanently fixed over a network of ground stations, with the first - EDRS-A - already in space. Each day, it can relay up to 40 terabytes of data acquired by observation satellites, UAVs and manned aircraft, at a rate of 1.8 Gbit/s.

SSL Selected to Provide Direct Broadcasting Satellite to B-SAT

March 26, 2018 - SSL announced that it was selected as a trusted partner to provide a broadcasting satellite for Broadcasting Satellite System Corporation (B-SAT). As the leading broadcasting satellite operator in Japan, B-SAT will use the Direct-to-Home (DTH) television satellite to ensure exceptional ultra-high definition video distribution for the 2020 Tokyo Olympics. SSL provided BSAT-4a to B-SAT in November 2017, and BSAT-4b will be a similar high-performance Ku-band broadcasting satellite. BSAT-4b will be co-located with BSAT-4a at 110 degrees East Longitude, and will function as a back-up that will secure highly-reliable services. B-SAT-4b is designed to provide service for 15 years or longer, and is based on the world's most popular commercial communications satellite platform, the SSL 1300, which has the

capability to support a broad range of applications and technology advances.

Spacecom Selects SSL to Build AMOS-8 Communications Satellite with Advanced Capabilities

March 26, 2018 - Spacecom announced it has chosen SSL to build its AMOS-8 advanced communications satellite. The satellite will deliver state-of-the-art broadcast, broadband and data services from Spacecom's 4°degrees West 'hot spot' to Europe, Africa and the Middle East. AMOS-8 will include flexible high power Ku-band and Ka-band payloads with steerable antennas to enable customers to deliver various added value services. The satellite is designed to provide service for a minimum of 15 years, and is based on the world's most popular commercial communications satellite platform – the SSL 1300 – which has the capability to support a broad range of advanced applications and technologies. The AMOS-8 geostationary communications satellite will be co-located with AMOS-3. A contract option has been signed between Spacecom and SpaceX for AMOS-8's scheduled launch in the second half of 2020.

GSLV Successfully Launches GSAT-6A Satellite

March 29, 2018 - India's Geosynchronous Satellite Launch Vehicle (GSLV-F08) successfully launched GSAT-6A Satellite into Geosynchronous Transfer Orbit (GTO) from the Second Launch Pad at Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota, the spaceport of India. This is the fifth consecutive success achieved by GSLV carrying indigenously developed Cryogenic Upper Stage. In its oval shaped GTO, GSAT-6A is now orbiting the Earth with a perigee (nearest point to Earth) of 169.4 km and an apogee (farthest point to Earth) of 36,692.5 km with an orbital inclination of 20.64 deg with respect to the equator. GSAT-6A is a communication satellite built by ISRO to provide mobile communication services through multi beam coverage. For this, it is equipped with S and C band transponders. In the coming days, the orbit of GSAT-6A will be raised from its present GTO to the final circular Geostationary Orbit (GSO) by firing the satellite's Liquid Apogee Motor (LAM) in stages. The Satellite will be commissioned into service after the completion of orbit raising operations and its positioning in the designated slot in GSO following in-orbit testing of its payloads.

Fifth Successful Iridium NEXT Launch Completed as Iridium Surpasses 1 Million Subscribers

March 30, 2018 - Iridium Communications announced that SpaceX successfully launched the fifth set of 10 Iridium NEXT satellites into orbit from Vandenberg Air Force Base in California. All 10 new satellites have successfully communicated with the Iridium Satellite Network Operations Center and are preparing to begin testing. Shortly before launch, the Iridium network met a major milestone as it surpassed 1 million active subscribers. This continues a trend of significant growth and serves as a testament to the reliable, resilient and uncompromising nature of the Iridium network.

EXECUTIVE MOVES

XTAR Announces New President and CEO

March 5, 2018 - XTAR, LLC has announced Jay Icard as its new President and CEO. Icard joins XTAR from Comtech Command & Control Technologies where he served as Senior Vice President of Strategic Sales. Icard spent the last 13 years in the satellite system integration space in a variety of roles with Comtech which acquired TeleCommunication Systems Inc. (TCS) in 2016. Prior to his tenure at Comtech and TCS, he worked for Oracle, MCI and in the Department of Defense acquisition community. XTAR provides satellite communications in the X-band frequency, which is the communications cornerstone of today's military, diplomatic, humanitarian and emergency disaster response operations.

Andre Jones Joins CPI Antenna Systems Division as Vice President, Business Development

March 8, 2018 - The Antenna Systems Division (ASD) of Communications & Power Industries (CPI) announced that Andre Jones is joining its management team as vice president, business development, effective immediately. In this role, Jones is responsible for the division's business development and marketing across satellite, radar, high frequency, data link and telemetry products. Jones brings more than 25 years of experience in satellite communications technology and services to his new position. Before joining CPI Antenna Systems Division, he served in several senior roles at leading industry firms, from managing the global sales team for Viasat Inc.'s commercial business, to serving as pre-sales director and team leader for General Dynamics Corporation's Satcom business, and leading international deployment and integration teams for Globalstar.

Kymeta Announces Appointment of David Harrower as Senior Vice President, Global Sales

March 8, 2018 - Kymeta, the communications company making good on the promise of global, mobile connectivity, announced that David Harrower will join the company as Senior Vice President, Global Sales. Kymeta recognizes the appointment of Harrower as a crucial component of the company's focus on global growth and accessibility across markets. Harrower has extensive experience leading, innovating, and building business communications and connectivity on a global scale, including having guided multiple companies to successful growth. He comes to Kymeta most recently from VT iDirect, where as Vice President, International Sales and Business Development, he developed quick-growth sales strategies that led to rapid global business expansion. Harrower previously also served as Regional Vice President, Russia, CIS, developing and executing strategy for Western/Eastern Europe and Russia/CIS. Prior to VT iDirect, Harrower served as Director, Russia, CIS, CEE, for Comtech, where he developed strategy for sales teams working in Eastern Europe.

OneWeb Finalizes Executive Team Appointments

March 8, 2018 - OneWeb, which is building the world's highest throughput satellite system to enable affordable, high-speed, low latency broadband services for all, has announced three new senior executives. David Tolley, Chief Financial Officer (CFO) who was previously at Blackstone, Stephen Chernow, General Counsel (GC) previously at Intelsat, and Vivek Jhamb, Chief Commercial Officer (CCO) who most recently managed data and connectivity carrier services globally for Vodafone have joined OneWeb. As OneWeb's CFO, David Tolley is responsible for leading OneWeb's financial operations – corporate and operational finance, corporate development, procurement, accounting, tax and financial reporting. As General Counsel, Stephen Chernow is responsible for all legal and regulatory matters. As the CCO, Vivek Jhamb is responsible for strategic leadership and defining and delivering OneWeb's compelling customer value proposition and the commercial infrastructure to support it.

Eutelsat Appoints Luis Jiménez Tuñón as Global Executive Vice President, Data Business Line

March 13, 2018 - Eutelsat Communications announced the appointment of Luis Jiménez Tuñón as Global Executive Vice President, Data Business Line. He will lead Eutelsat's Data Business, including fixed data, Internet of Things (IoT), wholesale and new data business segments, providing solutions across Eutelsat's global markets for enterprises, telecommunications operators and NGOs. Luis is an accomplished, high level executive with over 15 years of experience in leading firms in the space and telecommunications industry. He previously worked at the National Space Institute of Denmark and then ISDEFE (formerly INSA) in Spain as Deputy Commercial Director. In 2006 he joined Vodafone Spain as Executive for New Business and then later as VP of Strategy. From 2011 to 2016, Luis was CEO of Vodafone Enabler, as well as Senior Vice President of Vodafone Spain from 2013 to 2016, running its wholesale business. He also has a robust entrepreneurial background, having founded two companies in the technology sector, and is an Independent Board Director of the US listed Cloud communications company Pareteum Corporation.

Alpha Space Names Mark Gittleman as New President and CEO

March 16, 2018 - Alpha Space Test and Research Alliance, a commercial space and advanced technology company offering environmental exposure testing in space, has named Mark Gittleman as its new president and chief operating officer. As president and CEO, Gittleman will be responsible for leading the company into new commercial and NASA space endeavors while fostering the evolution and utilization of the Materials International Space Station Experiment (MISSE) flight facility. Gittleman previously served as executive vice president at Intuitive Machines, LLC, as a group vice president within Oceaneering International's Subsea Products business segment, and as the vice president and general manager of Oceaneering Space Systems.

Euroconsult Canada Team Expands with New Principal Advisor

March 22, 2018 - Euroconsult announced the hiring of Emeline Bardoux to the role of Principal Advisor at Euroconsult Canada, where she will contribute to the company's expanding presence and solidify industry relationships in the Aerospace & Defense areas. Emeline brings her extensive consulting experience and skills to Euroconsult during a time of intense activity in the sector, both in Canada and across the globe. Prior to Euroconsult, Emeline worked for Starburst Accelerator to help develop the strategy and innovation consulting practice first in Paris and then in Montreal, where she opened their office. Before Starburst, Emeline spent more than five years with Accenture in the Aerospace & Defense sector where she obtained a global certification in Lean Six Sigma and Project Management.

Thaicom Names Anant Kaewruamvongs CEO

March 29, 2018 - Thaicom Public Company Limited announced that its board of directors has appointed Anant Kaewruamvongs as new Chief Executive Officer and Director of the Board, effective May 1. Anant takes over from Paiboon Panuwattanawong who resigns from his positions as Director, Member of the Executive Committee and Chief Executive Officer, effective from 1 May 2018. Anant Kaewruamvongs, aged 57, has over 30 years of experience in the IT and telecommunications sectors in Asia, where he has held several executive positions. He was the CEO and managing director of CS Loxinfo, a leading Thai IT solutions provider, from 2013 to 2018.

REPORTS

Bandwidth Demand Poised For Significant Increase, Driven By Smart Ship Applications and Passenger Needs

March 8, 2018 - According to Euroconsult's newly-published report, Prospects for Maritime Satellite Communications, satellite connectivity in the maritime market will face booming bandwidth requirements coming not only from bandwidth-hungry passengers and crew but also from the overall development of smart applications. The total number of terminals used by the maritime satellite communications market experienced limited growth in 2017, with an increase of 0.7% year-over-year. However the VSAT market scored 18.8% growth in 2017, exceeding 23,000 terminals. Meanwhile the number of MSS terminals decreased by 0.4%, reaching 314,300 terminals. VSAT technology is starting to be taken up by the medium and small vessels market and this is gaining traction as operators are increasingly willing to migrate from MSS to VSAT solutions.

NSR's Satellite Capacity Pricing Index, 4th Edition

March 21, 2018 - NSR's Satellite Capacity Pricing Index examines and quantifies the key question facing the satellite industry: How much does satellite capacity cost, both now and in the future? With proprietary modelling and source information from satellite operators, service providers and end users, NSR's Satellite Capacity Pricing Index, 4th Edition (Q1, 2018) offers the industry's most detailed analysis of capacity pricing, evolution of price in various verticals, and the future state of the market. The satellite industry is in the midst of a general decline in capacity pricing, as supply increases, competition intensifies, and demand lags in certain markets. This state of play presents key areas of concern for operators around quantifying the market index lease price and what range of pricing can be expected both now and in the future. However, it also presents opportunities for buyers as lower priced capacity opens new business models and applications. NSR's Satellite Capacity Price Index, 4th Edition (SCPI4) analyzes both the buyer and seller angles and provides a detailed pricing assessment critical to all within the satcom leasing market.

\$1.7 Billion Revenue Opportunity in High Altitude Platforms (HAPs)

March 29, 2018 - NSR's newly released High Altitude Platforms (HAPs), 2nd Edition report forecasts \$1.7B in cumulative HAPs revenues over the next decade for airships, balloons and pseudo-satellite platforms. Of the three platforms, the balloon market remains the largest and strongest driver of revenues. Latin America, Africa and Asia present the largest service opportunity, mainly for communication and remote sensing applications, while North America and Europe dominate HAPs equipment revenues.

UPCOMING EVENTS

Broadband TV Connect Asia, 24-25 April, Bangkok, Thailand, <https://tmt.knect365.com/broadband-forum-asia/>

Broadband TV Connect Asia brings together the Digital TV and Broadband communities to learn, network and collaborate. Two defined tracks of content will tackle current challenges in network upgrade and digital TV transformation, while curated networking events will give you time to connect with both communities and understand how they are becoming increasingly converged; as operators struggle with increased consumer demand driven by video, and media is faced with challenges of digital delivery. Free tickets available for operators, apply now.

MilSatCom Asia-Pacific 2018, 14-15 May, Singapore, <http://www.milsatcomasia.com/APSCC>
SMI's 8th annual MilSatCom Asia Pacific conference will explore the increasing investment in Space and SatCom assets throughout the Asia-Pacific region, focusing on protected and tactical requirements facing the region, how capability gaps are cost-effectively being fulfilled through COTS procurement strategies and international cooperation, the utilisation of SatCom assets for civilian purposes in the region such as humanitarian and disaster response, and much more.

KOBA 2018, 15-18 May, Seoul, Korea, www.kobashow.com

Australasia Satellite Forum 2018, 22-23 May, Sydney, Australia, www.talksatellite.com/EVENTS.htm

Defence Satellites 2018, 5 -7 June, Paris, France, www.intelligence-sec.com/events/defence-satellites-2018

VIETNAM ICTCOMM 2018, 7-9 June, Ho Chi Minh City, Vietnam, www.ictcomm.vn/en/home

CASBAA Satellite Industry Forum, 25 June, Singapore, www.casbaa.com/events/list/

CommunicAsia 2018, 26-28 June, Singapore, www.communicasia.com

ConnecTechAsia 2018, 26-28 June, Singapore, www.connectechasia.com

ConnecTechAsia Summit is the pinnacle where over 150+ regional thought leaders industry and influencers meet to share about the driving forces of today's interconnected ecosystem. Covering 3 tracks on **NetworkComms**, **BroadcastMedia** and **EmergingTech**, the Summit themed "**Digital Business Transformation**" will feature a dedicated session on **Satcomm (Day 1)** covering topics such as industry analysis, satellite for 5G, LEO-GEO-MEO, spectrum wars and new standards for IoT, plus new business partnerships to drive innovation and business growth. Quote 'APSCC' to enjoy 15% discount off the registration fees! (*discount not applicable to Passports)

APSAT 2018, 3-4 July, Jakarta, Indonesia, <http://assi.or.id/en/>

World Satellite Business Week, 10-14 September, Paris, France, <http://www.satellite-business.com/en>

IBC 2018, 14-18 September, Amsterdam, the Netherlands, <https://show.ibc.org/>

VSAT Global 2018, 18-21 September, London, U.K., <https://tmt.knect365.com/vsat-global/>

Myanmar Connect 2018, 19-20 September, Nay Pyi Taw, Myanmar, <http://www.capacityconferences.com/Myanmar-Connect>

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About APSCC

APSCC is a non-profit, international organization representing all sectors of satellite and space-related industries. The aim of the organization is to exchange views and ideas on satellite technologies, systems, policies and outer space activities in general along with satellite communications including broadcasting for the betterment of the Asia-Pacific region. Conferences, forums, workshops, and exhibitions are organized through regional coordination with its members in order to promote new services and businesses via satellite as well as outer space activities. APSCC membership is open to any government body, public or private organization, association, or corporation that is involved in satellite services, risk management or associate fields such as data-casting, informatics, multi-media, telecommunications and other outer-space related activities with interests in the Asia-Pacific region. More information is available at www.apsc.or.kr.