

# APSCC Monthly e-Newsletter

## February 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.apsc.or.kr/sub4\\_5.asp](http://www.apsc.or.kr/sub4_5.asp). To unsubscribe, send an email to [info@apsc.or.kr](mailto:info@apsc.or.kr) with a title "Unsubscribe."

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

### INSIDE APSCC

#### **APSCC 2018 Satellite Conference & Exhibition, 2-4 October, 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@apsc.or.kr](mailto:info@apsc.or.kr) for general inquiries to the APSCC 2018.

#### **APSCC Supports Community Connect Initiative**

APSCC supports a new initiative ([click here for full Community Connect Paper](#)) aimed at facilitating global broadband with satellite's role highlighted. The goals of Community Connect are:

- *Enabling 100% availability of broadband communications services, everywhere*
- *Providing consumers, business, governments, hospitals, schools and others access to broadband services, wherever they are located*
- *Stimulating the development of jobs and the local economy by increased access to broadband services*
- *Increasing educational skills, access to health care and e-government to local communities*

In order to achieve these goals, Community Connect urges regulators, satellite network operators and service providers & integrators to take the following actions:

- *Adopt technology neutral regulations that enable competition among platforms, including for spectrum, universal service and interconnection*
- *Eliminate requirements that limit market access to domestic service providers*
- *Adopt and publish clear and transparent licensing requirements*
- *Adopt blanket licensing for satellite user terminals*
- *Adopt and publish cost-based licensing fees*
- *Adopt cost-based cross-border customs charges*
- *Adopt globally harmonized equipment standards*
- *Work with regulators and communities to ensure that there are minimal regulatory burdens for an operator to install needed terrestrial infrastructure and the deployment of VSATs and other user terminal equipment*
- *Develop education and training programs for consumers and businesses in local communities to educate them about the benefits of broadband.*

### SATELLITE BUSINESS

#### **Thuraya, Addvalue Gain Access to Russian Maritime Market**

January 2, 2018 - Addvalue Technologies has, in collaboration with JSC GTNT, obtained type approval for the sales of the Thuraya Atlas IP terminal in Russia. The Thuraya Atlas IP is a maritime satellite terminal specifically designed and manufactured for Thuraya pursuant to a design and supply contract with Addvalue, and is the first Thuraya equipment of its kind to have received type approval from the Maritime and River Registers of Russia. GTNT is Thuraya's distribution partner in Russia. The Thuraya Atlas IP

terminal is capable of standard IP data transfer at rates of up to 444kbps and asymmetric streaming capability of 16kbps-384kbps. The terminal is designed to improve operational efficiency on-board ship through Port Forwarding which automatically forward data from shipboard equipment and devices to support M2M reporting routines. In addition to sending data to shore, land-based users can connect to the ship's sensors remotely and receive data without the intervention of the crew. A continuous GPS output enables position reporting in NMEA 2000 format.

### **Viasat to Upgrade NATO UHF Satellite Communications Control Stations**

January 3, 2018 - ViaSat was awarded a contract to upgrade the NATO UHF satellite communications (SATCOM) control stations to comply with the Integrated Waveform (IW) baseline. The upgrade gives NATO greater communications interoperability, scalability and flexibility across legacy and next-generation platforms to enhance situational awareness as the battlespace dynamically expands. As part of this award, NATO will upgrade its legacy UHF communications network to Viasat's Visual Integrated SATCOM Information, Operation and Networking (VISION) planning and network management platform, the first commercially-available software package to simultaneously support all 25-kHz legacy Demand-Assigned Multiple-Access (DAMA) and next-generation IW networks and services.

### **Dalkom Somalia Launches iDirect Network to Expand Satellite Connectivity**

January 3, 2018 - VT iDirect announced that Dalkom Somalia has installed an iDirect Hub and will leverage iDirect's series remotes to provide high-speed satellite connectivity in Somalia. The new iDirect network will enable Dalkom Somalia to scale its service more cost-effectively, expand end user data rates up to 38.5 Mbps, and improve Service Level Agreements by reducing service set-up duration. It will also provide back-up connectivity for service restoration in cities as needed.

### **AeroVironment in Joint Venture with Japan's Softbank**

January 3, 2018 - AeroVironment, Inc., a global leader in unmanned aircraft systems (UAS) for both defense and commercial applications, announced the formation of a joint venture to develop solar-powered high-altitude long-endurance, or HALE, UAS for commercial operations. This category of UAS is also referred to as high-altitude pseudo-satellites, or HAPS. The joint venture will fund the development program up to a net maximum value of \$65,011,481. The joint venture, HAPSMobile, Inc., is a Japanese corporation that is 95 percent funded and owned by Japan-based telecommunications operator SoftBank Corp. and 5 percent funded and owned by AeroVironment, Inc. AeroVironment is committed to contribute \$5 million in capital for its 5 percent ownership of the joint venture, and has an option to increase its ownership stake in HAPSMobile up to 19 percent at the same cost basis as its initial 5 percent purchase.

### **Turkish Cadets Learn GMDSS Operation Using Cobham Tech**

January 8, 2018 - A new Turkish training ship operated by TUDEV, the Turkish Maritime Education Foundation, is now providing vital safety and operational training for Turkish maritime cadets following installation of an extensive suite of SAILOR GMDSS solutions including Inmarsat Mini-C and maritime radios, all operated through a unique touch-screen user interface. The SAILOR 6000 GMDSS products used on board the Ro-Ro/Passenger ship 'SAMSUN', which was recently chartered and converted for training by TUDEV, the Turkish Maritime Education Foundation, are the foundation of a diverse curriculum delivered during extended training in Turkish waters. The most recent voyage took place over 60 days, with 219 cadets navigating the Aegean and Mediterranean coasts of Turkey before moving to Istanbul and the Black Sea coast.

### **Panasonic Avionics Unveils Third Generation Satellite Communications Network**

January 8, 2018 - Panasonic Avionics Corporation (Panasonic) has introduced a major evolution of its satellite connectivity service with the introduction of its third generation communications network. Panasonic's third generation network is built to meet the growing connectivity demands of airlines and their passengers. Throughout the first quarter of 2018, aircraft from a number of airlines will be transitioned to Panasonic's new network. In addition, Panasonic subsidiary, ITC Global, will leverage Panasonic's new broadband network to deliver connectivity to its energy, maritime and enterprise customers.

### **Viasat Affirms Commercial Service Launch for February 2018**

January 9, 2018 - Viasat has begun beta service on the ViaSat-2 satellite, and affirmed plans for full commercial service launch in February 2018. The ViaSat-2 satellite system is expected to significantly

improve speeds, reduce costs and expand the footprint of broadband services across North America, Central America, the Caribbean, a portion of northern South America, as well as the primary aeronautical and maritime routes across the Atlantic Ocean between North America and Europe. To-date, Viasat has successfully completed a number of key performance tests on the ViaSat-2 satellite and end-to-end network, including demonstrating downstream speeds of over 100 Mbps to production consumer terminals. The satellite ground network and other networking technologies are performing better than initially planned as measured in successful alpha testing.

#### **Eutelsat and China Unicom Join Forces to Provide Satellite Communication Services**

January 9, 2018 - On the occasion of French President Emmanuel Macron's state visit to China, Eutelsat Communications has signed a MoU with China United Network Communications Co., Ltd. (China Unicom) that is aimed at addressing the fast-growing satellite communications market in Asia-Pacific in the framework of the "Belt and Road" initiative. The MoU aims in particular to leverage resources on the EUTELSAT 172B satellite to enhance inflight connectivity services across an area stretching from the West coast of North America to Asia, and down to Australia. Cooperation to further develop satellite communication services across the globe is also under consideration.

#### **CETel to Provide Fibre-like Connectivity via SES Networks' MEO Fleet**

January 10, 2018 - CETel, a leading German service provider of global managed end-to-end solutions, has signed a five-year contract with SES Networks to connect new exploration and production sites in Africa via SES Networks' medium earth orbit (MEO) O3b satellite constellation. CETel will leverage the O3b fleet's low latency and high throughput capabilities for big data applications required by the exploration and production industry. With round trip latencies below 150 milliseconds, MEO-enabled networks are on par with standard fibre connections, and are more reliable and faster to deploy than other infrastructure. The inking of this MEO deal with SES Networks empowers CETel to serve new applications where lower-latency connectivity matters, and to complement the comprehensive and versatile business applications it currently serves today.

#### **De Poli Tankers and Marlink Renew Multi-band Satcom Commitment**

January 10, 2017 - Dutch ship owner De Poli Tankers BV has extended its contract with Marlink, securing high-bandwidth global communication using the Sealink Plus service for its fleet of eight chemical tankers and two gas tankers. De Poli Tankers' in-house ITC company, Maritime Performances BV, chose to retain the Sealink Plus service for the future as it combines high-bandwidth VSAT with unlimited L-band back-up in a single easy to manage bundle. De Poli Tankers first migrated to Marlink VSAT from L-band only communications in 2013, leveraging the increased bandwidth and cost management benefits to improve fleet and business operations while offering more availability and quality for its crew communication facilities. Sealink Plus is delivered through 1 metre Ku-band antennas and the latest modem technology, while Marlink's state-of-the-art XChange centralised IT and communications management system provides simplified administration including managing time slots for crew usage.

#### **Yahsat and Tanaza Partner to Increase the Number of Public WiFi Hotspots Globally**

January 10, 2018 - Yahsat, the UAE based satellite operator, announced the signature of a Memorandum of Understanding (MoU) with Tanaza, the Italian Wi-Fi cloud management software provider. Under the terms of the MoU, Tanaza will provide Yahsat with a web platform to manage multiple users accessing Wi-Fi and social hotspots across the operator's coverage footprint. Since forming in 2010, Tanaza has built a client base of over 800 partners with millions of Wi-Fi users in more than 130 countries. Yahsat will take advantage of the Tanaza's cloud-based software to allow Wi-Fi connections across geographies, with easy management and effortless user access.

#### **Bentley Walker Drives iDirect DVB-S2X Deployment in the Middle East and Africa**

January 12, 2018 - Bentley Walker, the largest supplier and operator of VSAT Networks outside of North America, announces the launch of their iDirect-based DVB-S2X service in Afghanistan, following highly successful deployments in Iraq and Libya. Utilising Avanti Communications' Ka-band satellite capacity, this latest launch provides Bentley Walker's customers a seamless upgrade path to utilise the iDirect iQ Series family of modems for increased throughputs. The iQ Desktop modem supports a full range of DVB-S2X MODCODS up to 256APSK with a wide range of FEC rates and Adaptive TDMA, allowing greater bandwidth efficiencies.

### **Leading Automotive, Telecom and ITS Companies Unveil First Cellular V2X Trials in Japan**

January 12, 2018 - Continental, Ericsson, Nissan, NTT DOCOMO, INC., OKI and Qualcomm Technologies, Inc., a subsidiary of Qualcomm Incorporated, announced plans to carry out their first Cellular Vehicle-to-Everything (C-V2X) trials in Japan. The objective is to validate and demonstrate the benefits of C-V2X using direct communication technology defined by the 3rd Generation Partnership Project (3GPP) in their Release 14 specifications. The trials are designed to show the enhanced range reliability and latency benefits of C-V2X direct communications operated in 5 GHz band. Additionally, the C-V2X trials are designed to demonstrate the complementary benefits of network-based communications utilizing LTE-Advanced (LTE-A). The trial results will help develop the ecosystem by providing inputs to the relevant stakeholders, including ITS-related organizations and government agencies, as we prepare for the connected car of the future and the industry's evolutionary transition towards 5G New Radio (NR), the new global cellular standard being defined in 3GPP.

### **CETel and Arabsat Team to Offer Business Continuity Services**

January 13, 2018 - Arabsat has teamed up with CETel to offer unique and exclusive Business Continuity Services. Building on a long-lasting relationship the two partners developed a remarkable product for companies to necessitate safeguarding their existing networks for redundancy, back-up and security reasons. Big Data and permanent connectivity requirements made service availability the heart of every operation and no organization is willing to rely on a single string when it comes to connectivity and communications. The service is initially offered on, but not limited to, the powerful ARABSAT-5C satellite, located at 20° East.

### **AsiaSat Grows its Broadcast Product Portfolio to Enable Worldwide Business Opportunities**

January 15, 2018 - AsiaSat has broadened its satellite and media solutions with the addition of IP-based delivery solutions and OverThe-Top (OTT) service. AsiaSat recognises the demand for next generation distribution of broadcast content, and evaluated new distribution technologies throughout 2017. The proliferation of online content and the traditional paradigm of using a large TV set is now being augmented with portable devices. Viewers are now able to watch content when they want and where they want quickly and easily: "Content Anytime, Anywhere". AsiaSat is ready to deliver video content through its new IP platform, defined as a "hybrid solution" combining satellite and IP-based solutions. Satellite delivery is in the heart of AsiaSat's media solutions. The hybrid nature of the product opens business opportunities to rural areas for village WiFi, communities (bars, schools, airports, etc.) or mobility services (maritime, in-flight connectivity) allowing AsiaSat's customers to benefit from ready-to-use solutions. These solutions are fully managed and supported by AsiaSat's world-class Tai Po teleport infrastructure in Hong Kong, with 24/7 monitoring from AsiaSat's Customer Network Centre.

### **Talia Partners with Newtec and Increases Capacity on Arabsat 5C Ka across the Middle East**

January 15, 2018 - Talia has purchased an additional Newtec Dialog® platform to provide Ka-band High Throughput Satellite (HTS) services to Afghanistan and Iraq. The additions will provide access to multiple transponders on Arabsat's 5C Ka-band satellite, located at 20 Degrees East. Talia continues to operate high-quality VSAT and terrestrial services to the African and Middle Eastern regions. In these areas, Talia provides sales and support through local offices in Iraq and Afghanistan. The HTS Newtec Dialog platform uses small VSAT antennas to create a new lower price point for Internet access in the region. This new lower price point for hardware and services greatly enhances the ability to get people connected to the Internet – supporting Talia's commitment to transform communities and economies as part of its corporate social responsibility programme.

### **Quika Launches World's First Free Satellite Internet Service**

January 15, 2018 - Quika Ltd launches the world's first entirely free high-speed satellite internet for consumers in developing countries. Designed to address a leading cause of economic and social inequality, Quika responds to the growing disparity between regions with high and low investment, and limited access to internet infrastructure. Quika Free will be supported by Quika's commercial activities. The service is available to all individuals and businesses and will launch in Q2 of 2018 across Africa and the Middle East before rolling out to other developing countries. Quika uses GEO and LEO constellations to provide high-speed, low latency Ka-band internet using high-throughput satellites. Put simply, by solving the challenges to internet adoption, such as lack of infrastructure and affordability, Quika offers a bright future for those with sub-standard or no access to the internet. Quika's mission is to connect the unconnected for free to overcome digital inequality and create a better world to everyone. With so much

untapped potential, Quika empowers communities through the transformative educational, economic and social benefits that online connectivity can bring.

#### **XipLink and Virtel Announce Distribution Partnership for MENA**

January 15, 2018 - XipLink, the technology leader in Wireless Link Optimization, and Virtel, a leader in satellite hardware and equipment distribution, have announced a Value-Added Distribution partnership that will provide XipLink Appliances (XA) and Specialty (XS) products to the MENA marketplace. In addition, Virtel will also distribute the new XipLink Virtual (XV) product line for solutions in software defined architectures. The distribution agreement is effective immediately with first orders in-house and personnel in training.

#### **UnicomAirNet Enters Global Satellite Communications Market with Further Great Transform**

January 15, 2018 - China United Network Communications Limited (China Unicom) signed and concluded the Memorandum of Understanding and Cooperation with Eutelsat, and reached a consensus on jointly developing satellite communications business for the regions along Belt and Road. UnicomAirNet Co., Ltd., established by China Unicom and ihangmei.com in 2017, will serve as the main undertaker in this satellite communication network service construction system in carrying out the implementation work of upgrading the whole satellite communication technology and operating aviation mobile internet. According to the Sino-French cooperation agreement, both parties will use EUTELSAT 172B satellite to improve China Unicom's satellite communication serviceability from the West Coast of North America to Asia and Oceania at the beginning of the cooperation; in the second stage, Eutelsat will provide China Unicom with customized satellite communication service in the regions along Belt and Road.

#### **Comtech Receives Follow-on Contract to Support U.S. Navy's Advanced TDMA Terminals**

January 17, 2018 - Comtech EF Data has received a follow-on contract to provide long-term support for the Advanced Time Division Multiple Access (TDMA) Interface Processor (ATIP) production terminals in support of the Space and Naval Warfare Systems Command (SPAWAR). This new contract is a 10-year IDIQ contract with a 5-year base and 5 one-year options. The total potential contract value is \$19.1 million. ATIP is a Layer-2 Ethernet bridging device installed on ship, shore and submarine platforms in the Navy Multiband Terminal (NMT). The ATIP program provides significant improvements to the Advanced Extremely High Frequency (AEHF) system's performance through dynamic bandwidth management, support for higher XDR data rates, and increased throughput.

#### **Airbus Wins Telephony Contract from the French Ministry of the Armed Forces**

January 17, 2018 - Airbus has been awarded the Symphonie contract by the French joint services directorate for defence infrastructure networks and information systems (DIRISI) for a period of seven years. It is part of the Descartes programme designed to modernise the telecommunication networks of the French Ministry of the Armed Forces. Symphonie will offer 270,000 users at the Ministry of the Armed Forces a telephony service at 1,500 sites in metropolitan France, the overseas territories (French Guiana, the Antilles, Réunion and Mayotte, New Caledonia, French Polynesia) and abroad (Senegal, Ivory Coast, Gabon, Djibouti, United Arab Emirates, Chad, Lebanon, external operations). It will entail an overhaul and, as of 2018, the deployment of a modern telephony solution for the various organisations at the Ministry of the Armed Forces.

#### **Arabsat Broadband Services Launch Arabsat Expand**

January 18, 2018 - Arabsat Broadband Services have launched Arabsat Expand, a satellite broadband service powered by Forsway's unique Hybrid Router technology. The service was designed and implemented by satellite services specialist SatConsultant for Arabsat Broadband Services. Arabsat Broadband Services will deliver Arabsat Expand through previously unused bandwidth aboard its satellites. This will increase capacity, thereby reducing congestion to deliver an excellent customer experience with a faster Internet download speed and at reduced costs. ODIN™ allows any type of narrow-band return channel to be linked to the high-throughput KU/KA-Band satellite bandwidth on Arabsat's BADR-7 satellite in remote locations across almost the whole of the Middle East and Africa. The Forsway solution is a unique fit for the problems of satellite broadband, especially in urban areas.

#### **Q-KON Deploys iDirect Regional Node Solution in Swaziland**

January 18, 2018 - Q-KON, a service provider and systems integrator deployed a satellite Regional Node solution to provide primary and backup communication for a financial VSAT network in Swaziland. Q-KON

partnered with VT iDirect, a member of Vision Technologies Systems (VT Systems) for the installation – a world first. Q-KON is a telecommunications system integrator and project house with almost 30 years' experience in the financial sector in most African countries. With a long history of communications networks in Swaziland, Q-KON was approached by a major bank in Swaziland to provide reliable primary and backup communication for their ATM's and branches, both in-country and back to its International Headquarters located in South Africa.

### **Comtech Receives Orders from Middle East Service Provider for Advanced Location Platform**

January 18, 2018 - Comtech Telecommunications Corp. announced that during its second quarter of fiscal 2018, its Enterprise Technologies group, which is part of Comtech's Commercial Solutions segment, has received \$3.8 million of funded orders from a major Middle East service provider for a complete suite of Location Based Services (LBS) to be used to support multiple application deployments, including mobile devices and Internet of Things (IoT). Comtech's LBS platform supports the generation and distribution of location information for both indoor and outdoor environments, enabling the development of state-of-the-art LBS applications capable of locating target subscribers in 2G, 3G and 4G networks.

### **Speedcast Awarded Contract for Global Fully-Managed Communications**

January 19, 2018 - Speedcast International Limited has been selected by Noble Corporation plc to provide new IT communications equipment and fully-managed connectivity services to their global drilling fleet. Through a combination of satellite Very Small Aperture Terminals (VSAT) and 4G/LTE in key regions, Speedcast will deliver end-to-end managed communication services to Noble's fleet of vessels and rigs. The solution includes a technology change-out of the fleet's entire hardware infrastructure, with installations of dual-band antennas and the latest modem technologies to maximize throughput, security and redundancy. Noble will also benefit from segmented operational and crew networks to optimize efficiency and network availability. The end-to-end service will be supported by Speedcast's 24x7x365 global customer service centers, with local field engineers in each operating region to provide fast, reliable support, unmatched in the industry.

### **NATO Awards Cobham Operational Readiness Training Contract**

January 19, 2018 - Cobham announced that its Special Mission business has been awarded a follow on contract to deliver Operational Readiness Training to NATO for up to five years. The contract, which was won after a competitive tender process, will deliver electronic warfare and threat simulation training in order to prepare NATO allied forces for the complex and multi-layered front-line threats of today and the future. Training will be delivered using Cobham owned and operated aircraft, crewed by highly experienced Cobham aircrew, carrying a suite of either NATO furnished equipment or Cobham's in-house developed electronic warfare training podded technology.

### **GMV Forms Part of OCEAN2020, Europe's Maritime-Surveillance Technology Development Program**

January 22, 2018 - In coordination with the Spanish MoD, the Directorate General of Armament and Material (Dirección General de Armamento y Material: DGAM) and the Spanish Navy, GMV forms part of the European OCEAN2020 consortium, to which the European Commission has awarded the biggest project of the first round of activities of the Preparatory Action on Defense Research program (PADR). Primed by the Italian multinational LEONARDO, the consortium of 42 partners from 15 European countries will be signing the contract with the European Defense Agency (EDA) in the coming weeks. This project, the biggest maritime-surveillance technology development program, represents one of the mainstays of the PADR, which sets out to prove the feasibility of a specific defense research program in the next EU Multiannual Financial Framework of 2021-2027 (European Defence Research Programme: EDRP).

### **GEE to Elevate Airline Passenger Experience over North America with SES HTS Satellite Capacity**

January 23, 2018 - Global Eagle Entertainment (GEE) is aiming to provide airline passengers travelling across North America with a connected inflight experience far more like the one passenger enjoy on the ground, tripling the amount of high throughput satellite (HTS) capacity secured with SES Networks aboard the SES-15 satellite. SES announced that Global Eagle has secured a major increase of Ku-band capacity on its new hybrid SES-15 HTS satellite to enable the delivery of high-speed broadband and a wide range of inflight communications and operational applications aboard commercial airline flights throughout the US, including the increasingly important US mainland to Hawaii routes. In the past several years, Global Eagle has doubled its capacity with SES Networks on an average of every eight months to meet the rising demand for high-quality inflight connectivity around the world.

### **Inmarsat Adapts Fleet Xpress for Offshore Support Vessels**

January 23, 2018 - Inmarsat has launched a new set of Fleet Xpress plans designed specifically to meet the technical and commercial requirements of offshore support vessels (OSVs). The new plan exploits the technical capabilities inherent to Fleet Xpress, such as high-speed connections and guaranteed performance, to offer vessel operators levels of flexibility that are naturally suited to the demanding requirements of a high-end sector such as offshore support. It recognizes that connectivity needs onboard OSVs change frequently and that swings in data usage are likely to be more pronounced than for conventional cargo ships by accommodating free upgrades and downgrades in service levels during the 36-month contract period. Supported by a 1m antenna, Fleet Xpress for OSVs delivers committed information rates of up to 3Mbps for uploads and 6Mbps for downloads with a standard antenna, climbing to 5Mbps and 10Mbps respectively with an enhanced antenna. When off-hire, a more economic 128kbps/128Kbps link may be sufficient to keep core operational data exchange ticking over.

### **SSTL Joins Viasat's Real Time Earth Network**

January 25, 2018 - Surrey Satellite Technology Ltd (SSTL) and Viasat marked the start of operations of the new Viasat antenna system installed at SSTL's Guildford headquarters. The new antenna system forms part of the Viasat Real-Time Earth (RTE) network, a hybrid ground and space network, which has been designed to provide low-latency satellite data to users on-demand without the need to invest in a dedicated antenna system. Through this relationship, SSTL can now offer satellites with a full range of ground services to their customers, enabling quick delivery of data to customers' processing centres on a subscription basis. The antenna system installed at SSTL is a full-motion, 5.4m system that can operate in both S and X bands and is fully-controlled from the Viasat Network Operation Centre in Colorado.

### **Elbit Systems Awarded Contract to Supply TLS Services to the Australian Department of Defence**

January 25, 2018 - Elbit Systems announced that its subsidiary, Elbit Systems of Australia Pty Ltd., was awarded a \$150 million contract by the Australian Department of Defence's Capability Acquisition and Sustainment Group to provide Through Life Support (TLS) services to the Australian Defence Force (ADF) for the Battle Management System Command and Control (BMS C2). The contract is for a five-year base period. Optional extensions of up to seven years may be exercised in the future.

### **Thuraya Launches its First Dual-mode, Mobile M2M Solution**

January 29, 2018 - Thuraya Telecommunications Company announced the launch of its Thuraya Tracking and Monitoring (T2M) service in conjunction with the launch of its first product release of the year, the T2M-DUAL terminal. A mobile, dual-mode device for superior M2M communications and remote asset tracking and monitoring, the T2M-DUAL enables the simultaneous collection of data from multiple points including location information, data from external sensors and peripheral devices, and input gathered from vehicle or heavy equipment CANBus. The T2M-DUAL's robust system and interoperability render it a top-class solution for widespread projects in sectors like transportation, logistics, energy, utilities, agriculture and mining. The solution brings unprecedented ease of integration to applications that are traditionally more complex to manage and monitor, such as vehicle tracking and fuel consumption, thereby resulting in operational efficiency.

### **Comtech EF Data Awarded Order from Telesat for Infrastructure Equipment in Canada**

January 29, 2018 - Comtech EF Data has been awarded a multi-million dollar infrastructure equipment order from Telesat. Telesat will utilize the equipment to support its multi-Gigabit enhanced connectivity solutions for remote communities in Canada's Far North. The order specified Comtech EF Data's CDM-760 Advanced High-Speed Trunking and Broadcast Modem and the FX Series WAN Optimization by its subsidiary, Memotec. The CDM-760 Advanced High-Speed Trunking and Broadcast Modem was designed to be the most efficient, highest throughput, point-to-point trunking and broadcast modem available. Telesat will combine the performance of powerful Ka-band, high throughput satellite (HTS) spot beams aboard its new Telstar 19 VANTAGE satellite, scheduled to launch mid-2018, with Comtech EF Data's CDM-760 Advanced High-Speed Trunking and Broadcast Modem and FX Series.

### **iDirect Signs MoU with Ghalam of Kazakhstan to Develop Next-Generation Ground Technologies**

January 29, 2018 - VT iDirect has signed a MoU with Ghalam LLP, a Kazakhstan Airbus Defence and Space joint venture, to explore the development of next-generation ground technologies to support initiatives that bridge the digital divide in the region, particularly the Kazakhstan-2050 Strategy and "Digital Kazakhstan" government programme. VT iDirect's technical expertise will support Ghalam LLP in

developing technologies to tackle digital divide issues, and provide connectivity to the populace in a cost-effective manner. The collaboration will also provide access to the latest, highest performing, and most efficient DVB-S2X technology in the market. Ghulam LLP is an operator of the most advanced Spacecraft Assembling and Integration Test Complex (SBIK) in the Commonwealth of Independent States. It designs and manufactures different space craft, satellite and ground segment components for space and other high-tech industries.

#### **OmniAccess to Begin Testing and Trials on Telesat's Phase 1 LEO Satellite**

January 29, 2018 - Telesat and OmniAccess, a leading supplier of integrated communications solutions to superyachts and cruise ships, announced that OmniAccess will be cooperating in live, over-the-air trials on Telesat's low earth orbit (LEO) satellite system. 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, will deliver transformative, low latency, fiber-like broadband for commercial and government users throughout the world. Telesat was the first satellite operator to provide bandwidth to OmniAccess and the companies have been working closely together throughout this decade. In November 2017, Marlink and OmniAccess announced plans to join forces and create a worldwide leader in maritime VSAT services, generating nearly \$500 million in annual revenues.

#### **Challenergy and SKY Perfect JSAT Collaborate for Electricity and Communications Services**

January 30, 2018 - Challenergy Inc. and SKY Perfect JSAT Corporation (SJC) will be collaborating with the aim of commercializing a service that combines wind power and satellite communications primarily for countries and regions with poor access to electricity and communication infrastructure by FY2019. A joint demonstration test was commenced in Okinawa Prefecture on January 10, 2018, as the first step of this collaboration. The collaboration between Challenergy and SJC will further reinforce the biggest benefit of satellite communications – to be connected anywhere and at any time. SJC plans to strengthen its solutions toward Japanese domestic disaster communications demand, which calls for even further advanced and sound use, as well as expand the services to the world's digital divide areas, such as Southeast Asia and Pacific island countries, which have poor access to electricity and communication infrastructure.

#### **Marlink Japan's Tokyo Office Expands**

January 30, 2018 - Marlink's Tokyo office has moved to new, larger premises as the Marlink Japan team grows to meet the needs of an expanding VSAT customer-base in the region. The office, which was first established in 1978, provides vital proximity to Japanese Ship owners and is a key player in the region's growing use of the latest satcom services such as Marlink Sealink VSAT and Inmarsat Fleet Xpress. As part of Marlink's global network of over 20 first-party facilities, Marlink Japan is currently playing a crucial role in supporting shipping companies to deliver more effective and available connectivity to crew members using multi-band VSAT services. In a double blind survey of Asian shipping companies in 2017, Japanese ship owners came out on top for committing to the use of satcom to improve crew welfare, which is reflected in VSAT customer growth in the region.

#### **Airbus to Provide Near Real-time Access to its Satellite Data**

January 30, 2018 - Airbus Defence and Space has launched near real-time satellite imagery capabilities together with its 24/7 Emergency Image Delivery Service to aid those facing emergency situations. By leveraging the Kongsberg Satellite Services (KSAT) polar ground station in Svalbard, Norway, Pléiades and SPOT constellation images are now retrieved at every orbit, resulting in ultra-fast image deliveries after collection, anywhere in the world. In addition to this advanced reactivity, the 24/7 Service gives customers easy, immediate and round-the-clock access to a dedicated team of satellite experts who provide timely support in case of unplanned events.

#### **Ivanhoe Mines and SES Networks Revolutionise Connectivity for Mining Industry in Congo**

January 31, 2018 - SES announced that the Kamo-a-Kakula Copper Project in the Democratic Republic of Congo (DRC) will benefit from reliable high-performance managed connectivity services delivered by SES Networks. The solution will be provided under an agreement with Ivanhoe Mines, a leading mineral exploration and development company. The managed services and fibre-like connectivity from SES Networks will be powered by its O3b Medium Earth Orbit satellite fleet. It will enable operators on site to do video-conferencing with headquarters, use cloud-based applications to access and upload critical data, and improve overall productivity and safety.

### **Globecomm Announces Robust Orders Year to Date for Fiscal Year 2018**

January 31, 2018 - Globecomm announced year to date orders valued at over \$130 million for fiscal year 2018, which began July 1, 2017. Orders from new customers as well as renewals and expansions contributed to robust growth across its Government, Media, Telecom, Enterprise, and Oil and Gas segments. Globecomm's new projects for the U.S. government include IPTV services (Globecomm's state-of-the-art content delivery platform), wireless services, and SATCOM engineering solutions. Innovative solutions such as Vector – Globecomm's cloud-based, virtualized video headend solution – and Ka-band broadcast uplink facilities have driven growth with major broadcasters. Globecomm has also experienced rapid growth in demand for the company's Internet of Things (IOT) Asset Tracking solutions. Globecomm has also been successful in winning new customer business in the Oil and Gas market. Projects awarded include managed VSAT networks for pipelines, offshore transport, and barge communications within the United States and globally.

## **BROADCASTING**

### **Nepal's DTH Dish Media Networks Adds to Capacity on AMOS-4 Satellite**

January 2, 2018 - Spacecom announced that Nepal's Dish Media Network has furthered its long-term connection on the AMOS-4 satellite with a contract for more capacity. AMOS-4, from its 65°E prime orbital position, provides a wide array of satellite services to customers from South Asia to East Africa. Dish Media Network Ltd. owns Nepal's fast growing DTH operator, Dishhome, whose distribution network covers all of Nepal. With substantial satellite capacity on AMOS-4, Dishhome will expand service offerings, adding more HD channels and bringing UHD to viewers. Dishhome's capacity on AMOS-4 is contracted for the satellite's lifetime. AMOS-4's eight Ku-band transponders of 108 MHz and four high-power Ka-band transponders of 216MHz, each with steerable beams, create a powerful platform for Asian, African and Middle Eastern broadcasters and telecom providers. Offering a wide range of cross-region, cross-band and cross-beam connectivity options, the satellite provides extensive broadcast and broadband satellite services capabilities including DTH, DBS, video distribution, VSAT communications and broadband Internet.

### **Globecast Extends Partnership with SES for Distribution Services to Orange Romania**

January 8, 2018 - Globecast has extended its partnership with SES for the premium TV distribution services it provides to Orange Romania using SES's satellite capacity. Under the multi-year extension announced by SES, Globecast will lease several transponders on ASTRA 5B at 31.5 degrees East to serve Orange Romania, which uses the capacity to broadcast 112 channels, of which 52 are in HD, using the DVB-S2 and MPEG-4 technical standards. Globecast manages the contribution, encryption and encoding for the entire TV package, as well as signal transport to the uplink facilities for ASTRA 5B. Orange Romania's premium TV offer was launched in June 2013 with the support of SES, leveraging the high power and wide coverage of the ASTRA 5B satellite to deliver HD channels via the smallest dish in the Romanian market. In a highly competitive TV market, with 98 percent pay-TV coverage and five operating DTH platforms, Orange TV's satellite platform has grown exponentially since its launch.

### **Tata Sky Expands Long-Term Security Partnership with Irdeto**

January 9, 2018 - Irdeto, the world leader in digital platform security, has expanded its long-term security partnership with Tata Sky, India's leading content distribution platform providing satellite pay TV services. The highly competitive satellite pay TV market in India requires operators like Tata Sky to continue innovating in order to meet consumer demand for premium solutions and services. With Irdeto, Tata Sky has a reliable and trustworthy security partner to ensure the secure delivery of content onto any device across its satellite and OTT platforms in India. Tata Sky will implement Irdeto Cloaked CA and Middleware to deliver an improved customer experience while ensuring that its valuable content remains secure. In addition, Tata Sky recently selected Irdeto to enhance its end-to-end solution for OTT services. Irdeto's OTT solutions simplify the operations and workflow of supporting multiple digital rights management (DRM) systems.

### **Arabsat Announces the Broadcast of Al Aan TV HD Exclusively on Arabsat Badr4**

January 11, 2018 - In addition to their SD channel on Arabsat, Al Aan TV, an Arab satellite TV channel based in Dubai, has just started broadcasting the HD channel exclusively on Arabsat. By broadcasting on

Arabsat Badr-4 at 26° East, Al Aan TV is able to reach more than 100 countries and millions of homes covering the majority of the Middle East, Africa, Europe and Central Asia.

### **Eutelsat Announces Rise of FTA HD Channels in Key 7/8° West Video Neighbourhood**

January 16, 2018 - Eutelsat Communications released new data about the TV channels it broadcasts from its 7/8° West video neighbourhood. The attraction of the region's 7/8° West neighbourhood is driven by the growth of High Definition content now broadcast on 187 channels at this position. One visible shift can be noticed when it comes to FTA channels, which is now broadcasting more than 110 HD channels, a 44% increase from January 2017 to January 2018. This acceleration, which once mainly applied to Gulf countries, now applies to the entire region, especially Levantine and North African countries. The pace of HD adoption is accelerating in the MENA region. According to Eutelsat's latest TV Observatory report relating to Algeria, Egypt, Morocco and Saudi Arabia, HD-equipped homes at 7/8° West neighbourhood are now reaching 20.6 million (66% of TV homes), up from 10.7 million in 2016.

### **Yospace and NexPlayer Help Broadcasters Monetise Live Streams on HTML5 Platforms**

January 18, 2018 - Yospace and NexStreaming announced an integration that simplifies the route to market for broadcasters wishing to monetise their live OTT streams. The companies have pre-integrated Yospace's HTML5 SDK into the NexPlayer HTML5 player, allowing Yospace's multi-award-winning Server-Side Dynamic Ad Insertion to be accompanied by real-time, client-side tracking. The integration also enables an interactive element to advertisements by allowing viewers to click on ads for more information on the product. The news is significant for broadcasters, who today are faced with an online marketplace in which device and platform fragmentation significantly complicates the process of delivering and effectively measuring their advertising.

### **CANAL+ Group Launches Ultra HD via SES Video at Astra 19.2 Degrees East**

January 18, 2018 - SES announced that CANAL+ Group, the leading pay-tv operator in France, is launching its new satellite Ultra HD offer on a newly-designed, state-of-the-art set-top box using an SES satellite. Canal+ Group delivers the UHD channels via ASTRA 19.2 degrees East, the leading satellite position in France. Leveraging the throughput and reach of satellite technology, Canal+ Group can make this offer available to 100% of TV households in the country. Using their existing satellite dish, all CANAL+ French satellite subscribers will be able to enjoy a wide range of premium UHD content, including cinema, series, original productions and sport, using a new UHD satellite decoder, LE DECODEUR. Equipped with eight satellite tuners and integrated WiFi, the decoder also offers multiple functionalities and a new viewing experience by enabling multi-device and multi-room video consumption.

### **Arabsat Announces the Broadcast of mtv Lebanon HD & One TV Exclusively on Arabsat Badr-4**

January 18, 2018 - mtv Lebanon HD has started by broadcasting on Arabsat Badr-4 satellite at 26°East, expanding its viewers reach from MENA to Europe. In addition, the new musical channel One TV also started broadcasted over satellite for the first time and only on Arabsat- Badr-6 satellite. mtv Lebanon & Arabsat has signed a long-term exclusivity agreement for both channels to start in 2018.

## **LAUNCH / SPACE**

### **Restore-L On-orbit Servicing Mission Enabled by SSL-built Spacecraft Passes Critical NASA's PDR**

January 2, 2018 - SSL, a business unit of Maxar Technologies (formerly MacDonald, Dettwiler and Associates Ltd.), announced that the Restore-L mission to provide satellite servicing in Low Earth Orbit (LEO) has completed an extensive NASA review called the Mission Preliminary Design Review (PDR) and is on track to meet its next development milestone, called Key Decision Point C (KDP-C). The on-schedule progress and successful reviews for this mission, which will develop and demonstrate key technologies essential to future NASA missions and commercial activities, are tangible evidence of SSL leadership, experience, and commitment to space innovation. As announced last year, SSL is working with NASA Goddard Space Flight Center's Satellite Servicing Projects Division (SSPD) to build a spacecraft that will – for the first time in history – refuel a satellite in LEO not designed to be serviced. In addition to demonstrating refueling capability, Restore-L will validate the use of tools, technologies and techniques developed to enable future space exploration missions and satellite servicing in LEO.

### **Orbital ATK Receives Order for Second In-orbit Satellite Servicing Vehicle**

January 4, 2018 - Orbital ATK has been awarded a contract for a second Mission Extension Vehicle (MEV-2). The vehicle was ordered by Intelsat S.A. to provide life extension services for an Intelsat satellite. Orbital ATK is now producing MEV-1, the industry's first commercial in-space satellite servicing system, for Intelsat with launch scheduled for late 2018. Under this new agreement, Orbital ATK will manufacture, test and launch MEV-2 and begin mission extension services in mid-2020. The MEV is based on the company's GEOStar™ spacecraft platform, and controlled by the company's satellite operations team. The MEV uses a reliable, low-risk docking system that attaches to existing features on a customer's satellite, and provides life-extending services by taking over the orbit maintenance and attitude control functions of the client's spacecraft. Each MEV vehicle has a 15-year design life with the ability to perform numerous dockings and repositionings during its life span.

### **ULA Completes Key Milestone for Launch of Boeing's Starliner**

January 4, 2018 - United Launch Alliance (ULA) successfully completed an Atlas V Launch Segment Design Certification Review (DCR) recently in preparation for the launch of astronauts to the International Space Station from U.S. soil in The Boeing Company's CST-100 Starliner spacecraft. ULA's Atlas V DCR supported the Boeing International Space Station (ISS) DCR that was held with NASA at Kennedy Space Center in early December. Launch vehicle production is currently on track for an uncrewed August 2018 Orbital Flight Test (OFT). The OFT booster for the uncrewed flight is in final assembly at the factory in Decatur, Ala., and the OFT Centaur upper stage has completed pressure testing. Other hardware such as the launch vehicle adapter and aeroshield production are on schedule to support test articles and flight.

### **APSTAR-6C Satellite Completed TVAC Phase Successfully**

January 8, 2018 - APSTAR 6C program has been proceeding smoothly. Satellite System Performance Test (SPT), Dynamics Test and Thermal Vacuum Chamber Test (TVAC) were completed successfully. These results showed the performance of the satellite is in line with specification. Currently the satellite entered into the integration phase at China Academy of Space Technology (CAST)'s Compact Antenna Test Range (CATR) facility, CATR is foreseen to be completed in February. Launch service progressed as scheduled, launch vehicle integration has completed successfully. Currently the vehicle is processing the Pre-Shipment Test, and will be ready for shipment in the first quarter of 2018. The project schedule shows that APSTAR-6C will be ready for shipment in first quarter of 2018, which would be launched by LM-3BE launch vehicle and replace in-orbit APSTAR-6 satellite which is positioned at 134 East in the middle of 2018.

### **Orbital ATK Awarded Contract for Intelsat Communications Satellite**

January 8, 2018 - Orbital ATK has been awarded a contract by Intelsat to build the Galaxy 30 communications satellite. The satellite will be based on Orbital ATK's highly successful GEOStar-2 satellite platform. Galaxy 30 will primarily serve video markets in North America. The satellite is scheduled to launch in early 2020. Galaxy 30 will be the 41st commercial spacecraft built by Orbital ATK for customers around the world. With its flight-proven GEOStar-2 spacecraft platform, Orbital ATK is the world's leading supplier of 1.5 - 5.5 kilowatt commercial geosynchronous (GEO) communications satellites used to provide direct-to-home TV broadcasting, cable program distribution, business data network capacity, regional mobile communications and similar services. The company has also manufactured three spacecraft on its new GEOStar-3 satellite platform which provides up to 8.0 kilowatt of payload power and can accommodate virtually all types of commercial communications payloads.

### **CGWIC Successfully Launches Two SuperView-1 Satellites**

January 9, 2018 - Two SuperView-1 satellites were successfully launched from Taiyuan Satellite Launch Center (TSLC) aboard a Long March 2D (LM-2D) launch vehicle. This is the first mission in Year of 2018 for China Space as well as the 261st flight of the Long March Family, which is also the 36th flight of LM-2D launch vehicle. SuperView-1 satellites, consisted of two 0.5m resolution commercial remote sensing satellites, together with the two satellites, already in service, of the same specifications launched on December 28th, 2016, are the first step of the SuperView constellation. With the advanced AOCs and high integrated electronic system, the satellites feature low weight, high agility, high image quality, and will provide high resolution data services, value-added services and application solutions to land sources survey, mapping, environmental monitoring and surveillance and etc., which gradually realizes commercial operation of the high-resolution remote sensing satellites in China. The SuperView constellation, called "16+4+4+X", is projected to comprise of 16 optical satellites with 0.5m resolution,

four higher resolution satellites, four synthetic aperture radar (SAR) satellites and a fleet of satellites with video and hyper spectral cameras. The entire constellation will be completed by the end of 2022.

### **Arianespace and ArianeGroup Kick off Production for the Final Ariane 5 Launchers**

January 9, 2018 - ArianeGroup and its Arianespace subsidiary have announced an order for 10 Ariane 5 ECA launchers. With this latest order, there are now 23 Ariane 5 launchers in production or to be produced, from the PB+ and PC batches. With this latest "PC batch," the industry confirms its commitment to consolidate the competitiveness of the European launch offer even before the arrival of Ariane 6. The decision announced today follows the commitment made by Arianespace in December 2016 to initiate the procurement of long lead items (LLI). It also allows ArianeGroup, industrial prime contractor for the development and operation of the Ariane 5 and Ariane 6 launchers – as well as its European partners (over 600 companies in 13 countries, including some 350 small and medium-size enterprises) – to start initial production activity for these additional launchers.

### **Intelsat Signs Contract with Arianespace for Two Launches**

January 9, 2018 - Arianespace signed an agreement to launch two satellites for Intelsat. The first launch will carry the Galaxy 30 satellite together with the Orbital ATK Mission Extension Vehicle-2 (MEV- 2) as a stacked pair. Galaxy 30 will be the first replacement satellite for the North American Galaxy Fleet and in addition to its C-band payload, Galaxy 30 will include Ku- and Ka-band payloads to support broadband applications in North America. The launch of Galaxy 30 demonstrates Intelsat's commitment to its distribution neighborhoods, which has an unmatched penetration of cable headends in the United States. Galaxy 30 is based on Orbital ATK's GEOStar-2 satellite platform. The MEV-2 satellite is owned by Orbital ATK's Space Logistics LLC subsidiary. Intelsat will be the first customer of the MEV-2. The MEV-2 provides life-extending services by taking over the orbit maintenance and attitude control functions of a client's spacecraft. Under the contract, Arianespace will also launch an additional satellite for Intelsat in the second half of 2020. Arianespace will launch the first pair of satellites, Intelsat's Galaxy 30 satellite and the MEV-2, in early 2020 from Europe's Spaceport in South America aboard an Ariane 5 launch vehicle.

### **CGWIC and Royal Group Signed a Framework Agreement of TECHO 1 Project**

January 11, 2018 - CGWIC and Royal Group of Cambodia signed a Framework Agreement of TECHO 1 Communications Satellite Project in Peach Palace, Phnom Penh, with witness of visiting Chinese Premier Li Keqiang and Cambodian Prime Minister Samdech Techo Hun Sen. As a prime contractor of the project, CGWIC will deliver a communications satellite to Cambodian user in the form of satellite In Orbit Delivery.

### **ISRO Successfully Launches Cartosat-2 Series Satellite along with 30 Co-passenger Satellites**

January 12, 2018 - India's Polar Satellite Launch Vehicle, in its forty second flight (PSLV-C40), successfully launched the 710 kg Cartosat-2 Series Satellite for earth observation and 30 co-passenger satellites together weighing about 613 kg at lift-off. PSLV-C40 was launched from Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota. The co-passenger satellites comprise one Microsatellite and one Nanosatellite from India as well as 3 Microsatellites and 25 Nanosatellites from six countries, namely, Canada, Finland, France, Republic of Korea, UK and USA. The total weight of all the 31 satellites carried onboard PSLV-C40 is about 1323 kg. The 28 International customer satellites were launched as part of the commercial arrangements between Antrix Corporation Limited (Antrix), a Government of India company under Department of Space (DOS), the commercial arm of ISRO and the International customers.

### **ICEYE Launches World's First SAR Microsatellite**

January 12, 2018 - ICEYE, the leader in synthetic-aperture radar (SAR) technology for microsatellites providing expanded access to reliable and timely earth observation data, announced the successful launch of its proof-of-concept satellite mission, ICEYE-X1, on ISRO's PSLV-C40 rocket. ICEYE-X1 is ICEYE's initial proof-of-concept microsatellite mission using a SAR sensor. The goal of the mission is to validate in-orbit performance of the satellite and begin operations with select ICEYE customers. Data received from the satellite in space can be used for a wide variety of use cases including monitoring changing sea ice for maritime and environmental uses, tracking marine oil spills and helping to prevent illegal fishing, to name a few examples.

### **Telesat Begins Deploying LEO Constellation with Successful Launch of Phase 1 Satellite**

January 12, 2018 - Telesat announced the successful launch of its first LEO satellite, an important milestone in the company's plans to deploy a global LEO constellation that will revolutionize broadband

communications services around the world. Telesat's Phase 1 LEO satellite was launched aboard a Polar Satellite Launch Vehicle (PSLV) operated by the Indian Space Research Organization (ISRO). The spacecraft was built by Surrey Satellite Technology Ltd. (SSTL) based in the U.K., a world leader in small satellites and part of the Airbus Defence and Space group. Telesat's LEO constellation will deliver high-performing, cost-effective, fiber-like broadband anywhere in the world for business, government and individual users. The initial constellation will consist of approximately 120 satellites by 2021 and Telesat is evaluating options to expand its system beyond this initial configuration.

#### **SSTL Confirms the Successful Launch of CARBONITE-2 and Telesat LEO Phase 1 Satellite**

January 12, 2018 - Surrey Satellite Technology Ltd (SSTL) has confirmed the successful launch of CARBONITE-2, an Earth Observation technology demonstration mission owned and operated by SSTL, and of the Telesat LEO Phase 1 communications satellite, an important milestone in Telesat's plans to deploy a global low earth orbit (LEO) constellation that will revolutionise broadband communications services around the world. These two small SSTL satellites were launched into a 505km sun-synchronous orbit on board the PSLV launch vehicle from the Satash Dhawan Space Centre in Sriharikota, India. CARBONITE-2 is the second technology demonstration satellite in the series to be launched by SSTL. The CARBONITE-2 satellite flies enhanced avionics to provide increased data storage, faster data downlink, improved pointing accuracy, and a full colour HD video camera.

#### **China Sends Twin BeiDou-3 Navigation Satellites into Space**

January 12, 2018 - China sent twin satellites into space on a single carrier rocket, as part of efforts to enable its BeiDou system to provide navigation and positioning services to countries along the Belt and Road by the end of 2018. The Long March-3B carrier rocket took off from Xichang Satellite Launch Center in the southwestern province of Sichuan. This is the first launch of the BeiDou satellites in 2018, which will see intensive launches throughout the year. The twin satellites are coded the 26th and 27th satellites in the BeiDou Navigation Satellite System (BDS).

#### **Thales Alenia Space to Provide the X-band Transmitter for South Korea's KOMPSAT-7**

January 16, 2018 - Thales Alenia Space has signed a new contract with the Korea Aerospace Research Institute (KARI) to deliver the X-band communications system for the KOMPSAT-7 mission (Korea Multi-Purpose Satellite 7), with a target launch in 2021 and a lifetime of five years. KOMPSAT-7 is an Earth observation mission in Low Earth Orbit (LEO) developed by KARI to provide high resolution satellite images to satisfy South Korea's national needs. It will embark a high resolution optical instrument, AEISS-HR (Advanced Earth Imaging Sensor System - High Resolution) featuring world-class 0.3 meter resolution. The X-band system will be in charge of transmitting the high resolution images to the ground station through a high speed data downlink.

#### **GomSpace Signs Contract for Low-inclination Launch on Virgin Orbit's LauncherOne**

January 16, 2018 - GomSpace has purchased a launch for several nanosatellites onboard a LauncherOne rocket from the California based company Virgin Orbit. The flight, which is bound for a low-inclination orbit, is scheduled to occur in early 2019. GomSpace will use the launch to further build out a constellation of small satellites that will use Automatic Dependent Surveillance-Broadcast (ADS-B) and Automatic Identification System (AIS) signal monitoring to track civilian aircraft and ocean-going vessels. This satellite constellation will provide continuous monitoring between 37 degrees North and 37 degrees South, helping provide global situational awareness for air-traffic controllers and shipping companies, and aiding in the identification and location of wayward or missing planes and ships. The satellites slated for flight on LauncherOne are based closely on the flight-proven hardware used in the successful GOMX-1 and GOMX-3 missions, and will be designed, manufactured, and commissioned by GomSpace. The constellation will be operated by GomSpace's Mauritius-based customer, Aerial & Maritime Ltd., once in orbit.

#### **ESA and China Team up on Typhoon-Targeting Imager**

January 17, 2018 - European Space Agency (ESA) has teamed up with the Chinese Academy of Sciences to test an instrument capable of peering down from orbit through dense clouds and rain to sound the depths of typhoons and storms. China's National Space Science Center – an entity under the Academy – in Beijing has built a 3 m-diameter prototype millimetre-wave instrument for ground testing. A smaller ESA-led instrument that works on a separate, complementary frequency band was slotted into it, then the combined instrument underwent ground testing.

### **Success of Epsilon-3 Launch with ASNARO-2 Aboard**

January 18, 2018 - Japan Aerospace Exploration Agency (JAXA) launched Epsilon-3, the third Epsilon launch vehicle which encapsulates NEC Small radar satellite "ASNARO-2", from the JAXA Uchinoura Space Center. The launch occurred on time. The launch and flight of Epsilon-3 took place normally. Approximately 52 minutes 35 seconds into the flight, the separation of ASNARO-2 proceeded, with confirmation as successful.

### **LM-11 Successfully Launched Canadian "KIPP" Cubesat**

January 19, 2018 - Long March 11 successfully launched Jilin-1 Video 07/08 Satellites as main passenger and Canadian KIPP satellite as one of the piggyback satellites from Jiuquan Satellite Launch Center. It marks the 264th flight of Long March family, and it is the 14th international piggyback launch services provided by Long March family. With this launch, Kepler Communication, a Canadian start-up communication satellite company based in Toronto, becomes the first commercial company ever to launch and operate a LEO communications satellite in Ku-band. KIPP is the first Canadian satellite launched in China. SLS, a Dutch company provided satellite deployer for this piggyback mission. KIPP is a 3U technical demonstration satellite. At present, both the solar array and antennas were deployed, and the KIPP satellite is in good condition. The main passenger of this mission is Jilin-1 Video 07/08 Satellites designed and manufactured by Chang Guang Satellite Technology Co.,LTD.

### **ULA Successfully Launches SBIRS GEO Flight 4 Mission for the U.S. Air Force**

January 19, 2018 - A United Launch Alliance (ULA) Atlas V rocket carrying the Space Based Infrared System (SBIRS) GEO Flight 4 mission lifted off from Space Launch Complex-41. SBIRS is considered one of the nation's highest priority space programs, and is designed to provide global, persistent, infrared surveillance capabilities to meet 21st century demands. This mission was launched aboard an Atlas V Evolved Expendable Launch Vehicle (EELV) 411 configuration vehicle, which includes a 4-meter large Payload Fairing (PLF). The Atlas booster for this mission was powered by the RD AMROSS RD-180 engine. Aerojet Rocketdyne provided the AJ-60A solid rocket booster (SRB) and RL10C-1 engine for the Centaur upper stage.

### **Rocket Lab Successfully Reaches Orbit and Deploys Payloads**

January 21, 2018 - Rocket Lab has successfully reached orbit with the test flight of its second Electron orbital launch vehicle, Still Testing. Electron lifted-off from Rocket Lab Launch Complex 1 on the Māhia Peninsula in New Zealand. Following successful first and second stage burns, Electron reached orbit and deployed customer payloads at 8 minutes and 31 seconds after lift-off. Rocket Lab currently has five Electron vehicles in production, with the next launch expected to take place in early 2018. At full production, Rocket Lab expects to launch more than 50 times a year, and is regulated to launch up to 120 times a year, more than any other commercial or government launch provider in history. Still Testing was carrying a Dove Pioneer Earth-imaging satellite for launch customer Planet, as well as two Lemur-2 satellites for weather and ship tracking company Spire. Rocket Lab's commercial phase will see Electron fly already-signed customers including NASA, Spire, Planet, Moon Express and Spaceflight.

### **MDA Selected to Study Alternatives to Protect Canadian Space Assets**

January 22, 2018 - MDA, a Maxar Technologies company announced that it has been awarded a contract by Public Service Procurement Canada on behalf of the Defence Research and Development Canada, under the Space Operations program within the Joint Force Development portfolio, to develop a Threat Detection and Early Warning System to provide protection for Canadian space-based assets. The contract is for the study, concepts and research and development phases which could lead to MDA pursuing subsequent phases of technology demonstration and technology pilot. The contract includes the work required for the development of the Threat Detection and Early Warning System (TDEWS) up to a proof-of-concept stage. The TDEWS will incorporate technologies and systems capable of providing automated, reliable early warning of potential in-orbit threats against operational Canadian satellites. The goal is to identify credible threats against space assets to generate operationally relevant intelligence and enable prompt mitigation actions.

### **China's "Micius" Completes Intercontinental Quantum Key Distribution**

January 22, 2018 - China's quantum satellite "Micius" has allowed scientists to achieve quantum key distribution between China and Austria, laying a foundation for building a global quantum-secured communication network. The achievement, jointly made by Chinese and Austrian scientists, was published

on Jan. 19 in the journal *Physical Review Letters*. It demonstrates that the Chinese quantum satellite is capable of facilitating intercontinental quantum-secured communications. Through satellite-to-ground secure key distribution, a secret key was created between the two countries at locations some 7,600 km away from each other. During the experiment, scientists transmitted images between the two countries, and a 75-minute video conference was successfully held between Beijing and Vienna. Traditional public key cryptography risks being hacked, while quantum key technology, used in quantum communication, eliminates the possibility of wiretapping and secures the communication. The satellite was launched on Aug. 16, 2016. In 2017, Chinese scientists achieved quantum key distribution from the satellite to the ground, and quantum teleportation from the ground to the satellite, based on experiments with the Micius.

### **ULA Assumes Marketing and Sales for Atlas V Commercial Launches from Lockheed Martin**

January 22, 2018 - United Launch Alliance (ULA) announced that it has assumed responsibility for the marketing and sales of Atlas V from Lockheed Martin Commercial Launch Services. In addition to performing all of the operational activities related to Atlas V launch services, as ULA has done since its formation in 2006, ULA now has the full authority to market and sell Atlas V launch services to commercial customers. ULA's Atlas V has flown 75 missions with 100 percent mission success, from numerous GPS satellites flying today to exploring the solar system and beyond, and has the highest reliability with the lowest insurance rates in the industry. ULA offers extensive experience from a long heritage of launching communications and Earth imaging commercial missions for customers around the world.

### **Clyde Space Satellite Launch Success**

January 23, 2018 - Scotland's pioneering spacecraft manufacturer, Clyde Space, has designed and built two advanced nanosatellites for Canadian company, Kepler Communications. The first spacecraft, KIPP, was successfully launched into Low Earth Orbit on Jan. 19 from the Jiuquan Satellite Launch Centre (JSLC) in North-western China. Kepler made contact with KIPP a few hours later with all spacecraft systems performing as planned. The cutting-edge Clyde Space nanosatellites, built in the heart of Glasgow, will support Kepler Communications in deploying its in-space telecommunications network, which will relay data for devices deployed in remote regions. This pilot satellite, an advanced 3U CubeSat, carries Kepler's novel Software Defined Radio (SDR) and antenna array making the company the first commercial company to launch and operate a Low-Earth Orbiting communications satellite in Ku-band.

### **China Puts High-Throughput Communication Satellite into Service**

January 23, 2018 - Shijian-13, China's first high-throughput communication satellite, has been put into service after completing a key laser communication test, China National Space Administration said. The high-orbit satellite has finished a two-way high-speed laser communication test between the satellite and ground, the first of its kind in the world, the administration said in a statement. Serving users in China, the satellite will connect communication base stations in remote areas and meet the needs of distance education, digital news gathering, and emergency communication. Shijian-13, launched from Xichang Satellite Launch Center in southwest China's Sichuan Province in 2017, has a transfer capacity of 20 Gbps and a designed orbital life of 15 years.

### **Singapore's NUS and DSO Set up Satellite Research Centre**

January 25, 2018 - The Faculty of Engineering at the National University of Singapore (NUS) and the DSO National Laboratories (DSO) jointly launched the Satellite Technology and Research Centre (STAR) to develop cutting-edge capabilities in distributed satellite systems, with a focus on flying multiple small satellites in formation or constellation. The new centre will also train undergraduates and graduate students to meet the manpower needs of Singapore's fledgling space industry. The centre will pioneer experimental satellite platforms, with a focus on the development of small satellites, and will deepen the local base of expertise in space and satellite technologies. In contrast to the traditional approach of building large satellites (weighing between a few hundred to a few thousand kilograms), STAR will build multiple small satellites, each weighing less than one tenth of conventional satellites, and fly them together. STAR's 1,400 sqm facility is currently home to 50 research staff and students.

### **Ariane 5 Launch VA241 for SES-14 and Al Yah 3**

January 26, 2018 - The launcher's liftoff took place on January 25. A few seconds after ignition of the upper stage, the second tracking station located in Natal, Brazil, did not acquire the launcher telemetry. This lack of telemetry lasted throughout the rest of powered flight. Lift off occurred as planned at 19:20 local time in Kourou on January 25 2018. At H0 + 9 minutes 26 seconds, ground tracking stations lost contact with the

Ariane 5 launcher. Initial investigations show that the situation results from a trajectory deviation. At the end of the mission, the launcher separated both satellites on a stable orbit. SES and Yahsat have acquired their respective satellites which are operating nominally. SES-14 will be positioned at 47.5 degrees West to serve Latin America, the Caribbean, North America and the North Atlantic region with C- and Ku-band wide beam coverage and Ku-band high throughput spot beam coverage. Al Yah 3, an all Ka-band satellite, is the first hybrid electric propulsion GEOStar-3 satellite to be completed by Orbital ATK. Al Yah 3 will join Al Yah 1 and Al Yah 2 in helping to empower millions of people across the Middle East, Africa, South West Asia and Brazil to access affordable Internet access via Yahsat's high-speed satellite broadband service, YahClick.

#### **Airbus Selected by ESA for EGNOS V3 Programme**

January 26, 2018 - Airbus has been selected by the European Space Agency (ESA) as the prime contractor to develop EGNOS V3, the next generation of the European Satellite Based Augmentation System (SBAS) planned to provide the aviation community with advanced Safety of Life services and new services to Maritime and Land users. Developed by ESA on behalf of the European Commission and the European GNSS Agency (GSA), EGNOS V3 (European Geostationary Navigation Overlay Service) will provide augmented operational Safety of Life services over Europe that improve the accuracy and availability of user positioning services from existing Global Navigation Satellite Systems (Galileo and GPS) and provides crucial integrity messages to EGNOS users with alerts within a few seconds in case of system degradation, consolidating EGNOS' position as one of the leading edge GNSS Systems in the future. EGNOS V3 will ensure a full continuity of service for the next decade and will be the first operational SBAS implementing the dual frequency and multi constellation world standard, with both GPS and Galileo, replacing EGNOS V2 which has been in operation since 2011.

#### **NASA-JAXA Joint Statement on Space Exploration**

January 26, 2018 - On January 24, 2018, Japan Aerospace Exploration Agency (JAXA) and the National Aeronautics and Space Administration (NASA) met to exchange their views on space exploration. The agencies signed a joint statement affirming their strong mutual interest in continued future cooperation in space exploration. Both agencies have established a strong and committed partnership throughout the many years of cooperation in all mission areas, including human exploration, Earth and space science, fundamental aeronautics, and especially through the International Space Station (ISS) Program. Both agencies affirmed to expand this partnership in the field of space exploration, upon sharing their long-term vision for expanding human presence deeper into the solar system, by starting with extending human presence to an orbiting platform around the moon, that can benefit from contributions and technological expertise from both agencies, acting as an important piece of infrastructure for human access to the lunar surface and eventually to Mars. Both agencies welcome on coordinating with their governments to enable an innovative and sustainable exploration program.

#### **SES Set to Expand O3b Fleet with Arrival of Four MEO Satellites in Kourou ahead of March Launch**

January 29, 2018 - Four new O3b satellites have arrived safely at the Guiana Space Centre in Kourou, French Guiana, in preparation for launch by a Soyuz vehicle in March 2018. The four O3b medium earth orbit (MEO) satellites will be placed in orbit nearly 8,000 kilometres from Earth, four times closer to the planet than geostationary satellites. Built by Thales Alenia Space, the Ka-band satellites will offer low latency, fibre-like connectivity to people and businesses in the growing mobility, fixed data and government markets. The launch of the new satellites will augment SES's fleet of 12 O3b satellites. Together, they will enable SES Networks to offer more capacity, enhanced coverage, increased efficiencies and greater reliability while delivering carrier-grade services including MEF Carrier Ethernet 2.0 certified services, to telcos, mobile network operators (MNOs), enterprises, internet service providers (ISPs) and government customers. SES will be launching another four satellites in the constellation with Arianespace in 2019, bringing the total number of O3b satellites to 20. The first 12 O3b satellites were launched by three Soyuz launch vehicles in 2013 and 2014.

#### **SSL Studies Next-Generation Space Architectures for the U.S. Air Force Space Enterprise Vision**

January 31, 2018 - SSL announced it is leveraging its heritage in developing advanced space architectures and systems to assist the U.S. Air Force Space and Missile Systems Center (USAF) with exploring new enterprise-level solutions to enable resilient space defense capabilities. The study is expected to accelerate crucial technologies for future missions as identified within the U.S. Air Force Space Enterprise Vision (SEV), and further distinguish SSL as a trusted partner to U.S. government agencies. The SEV recognizes

the increasing threat to space systems and provides an overarching vision for how the USAF should respond. In addition to enabling a more affordable and resilient national security space enterprise, the SEV shapes future space architectures intended to protect and defend our nation's space capabilities against emerging threats. SSL brings extensive expertise in the development of foundational and resilient space solutions to the study, including technologies for space infrastructure, affordable access to space, commercial data processing, and small satellites with the capability to support a broad range of future USAF missions.

### **SpaceX Successfully Launches GovSat-1**

January 31, 2018 - SpaceX successfully launched the GovSat-1 satellite to a Geostationary Transfer Orbit (GTO) from Space Launch Complex 40 (SLC-40) at Cape Canaveral Air Force Station, Florida. The satellite was deployed approximately 32 minutes after launch, putting the GovSat-1 satellite into its targeted orbit. Falcon 9's first stage for the GovSat-1 mission previously supported the NROL-76 mission from LC-39A in May 2017. GovSat is a brand operated by LuxGovSat S.A., a public-private joint venture between the Luxembourg Government and SES. Its mission is to provide secure, reliable and accessible satellite communication services for governments, addressing connectivity demands for defence and institutional security applications. GovSat-1 will be a multi-mission satellite that will use X-band and military Ka-band frequencies on high-power and fully steerable mission beams to support multiple operations.

## **EXECUTIVE MOVES**

### **Maxar Technologies Appoints Mike Greenley as Group President of MDA**

January 3, 2018 - Maxar Technologies announced the appointment of Mike Greenley to serve as Group President of MDA, a Maxar Technologies company with internationally recognized leadership in space robotics, satellite antennas and subsystems, surveillance and intelligence solutions, and defense and maritime systems. Reporting to the CEO of Maxar, Greenley assumes responsibility for taking MDA to the next level of growth and profitability. His responsibilities will include all of the MDA lines of business and its 1,900 employees. Primary locations include Surveillance and Intelligence in Richmond, British Columbia, Ottawa, Ontario, Halifax, Nova Scotia; Robotics and Automation in Brampton, Ontario; and Satellite Subsystems, in Montreal, Quebec. The appointment is effective from January 15, 2018. Greenley will be based in the Brampton, Ontario office. Most recently, Greenley was Sector President of L-3 WESCAM, based in Burlington, Ontario since 2016.

### **ATLAS Space Operations Names Mark Malosh as Chief Operating Officer**

January 4, 2018 - ATLAS Space Operations announced that Mark Malosh has joined the company as Chief Operating Officer. Malosh is a C-level professional with more than 25 years of leadership experience in the development and cultivation of tech industry start-ups from innovative business models into successful industry disruptors that produce a high return-on-investment. Prior to joining ATLAS, Mark, was a founding member of the technical team at Gogo Inflight, Inc., the world's leading in-flight communications provider. Serving as Senior Vice President, Mark was responsible for the delivery of technical product and services for both domestic and international airlines. Mark also managed technical operations for GoGo's national wireless network and infrastructure along with aircraft engineering and supply chain, as well as installation, service, and maintenance of equipment for more than 3,000 commercial aircraft.

### **Globecast Announces Jacques Rivals as Chief Quality and Change Officer**

January 8, 2018 - Globecast, the global solutions provider for media, announces Jacques Rivals as Chief Quality and Change Officer, effective immediately. In his new position, Rivals will work closely with the marketing, operations and sales teams in all regions on the quality control of Globecast's solutions. He will build and support transformation programs as part of Globecast's overall quality management strategy, helping to drive an enhanced customer experience. Rivals joined the Orange Group, Globecast's parent company, in 1986. Since then he's worked in regional operations, marketing, and B2C sales strategy and governance for Orange France. Since 2011, Rivals has been in charge of sales performance support for Orange's European Subsidiaries and has contributed to the design and launch of the Orange Group Customer Experience Program.

### **Dr K Sivan Appointed as New ISRO Chairman**

January 10, 2018 - Dr. Sivan K was appointed as the chairman of Indian Space Research Organisation (ISRO)

to replace of A S Kiran Kumar. The Appointments Committee of the Cabinet approved his appointment as secretary, Department of Space and chairman of Space Commission for a tenure of three years. Sivan, at present Director of Vikram Sarabhai Space Centre, will succeed Kumar, who was appointed on January 12, 2015. Sivan joined the ISRO in 1982 in PSLV project and has contributed immensely towards end to end mission planning, mission design, mission integration and analysis.

#### **Speedcast Appoints John Truschinger as Chief Information Officer**

January 17, 2018 - Speedcast International Limited announced the appointment of John Truschinger as Chief Information Officer (CIO), reporting to CEO Pierre-Jean Beylier. Truschinger is a veteran of the U.S. Marine Corps where he served as a sergeant until being honourably discharged in 1981. He has 35 years' experience working in IT and supply chain, and most recently held the position of SVP and CIO for Transocean until 2015. Over the past two years Truschinger has worked as a private consultant, providing IT, executive coaching and team-building related services to corporations. As Speedcast's CIO, he will be based in Houston and will assume global responsibility for IT, supply chain, QHSE and facilities, which were functions previously under the COO. He will also be in charge of a new department, digital transformation, which is being created as the group intends to further enhance its customers' experience.

#### **Marie-Sophie Ecuier Appointed Corporate Communications Director of Eutelsat**

January 25, 2018 - Eutelsat Communications announced the appointment of Marie-Sophie Ecuier as Corporate Communications Director. Marie-Sophie has a proven track record both in communications and the aeronautical and space industries, where she has gained most of her professional experience. She began her career at Thales' communications department before joining Itron in 2011 as Head of international press relations. Marie-Sophie has an extensive knowledge of Eutelsat, having joined its Corporate Communications Department in 2012. She was entrusted with various communications projects and worked as Head of media relations.

#### **League of Arab States Secretary-General Honors Arabsat CEO**

January 29, 2018 - League of Arab States Secretary General HE Mr. Ahmed Aboulgheit has honored The President & The Chief Executive Officer of Arab Satellite Communications Organization (ARASAT), for his efforts in the field of Arab Joint Labor. The ceremony was attended by Competent Arab Organizations and a crowd of Arab Media Figures. His Excellency gave the Shield of Honor to Eng. Khalid Bin Ahmed Balkheyour, President & CEO of Arabsat, in recognition of the great role he played in the field of Arab Joint Labor. The Secretary General praised the excellent performance of Arabsat in the field of satellite communications, which ranked Arabsat amongst the world class international satellite operators through its ambitious programs and projects carried out lately.

#### **Aerojet Rocketdyne Names Greg Jones as Senior Vice President, Strategy & Business Development**

January 29, 2018 - Aerojet Rocketdyne announced that Greg Jones will join the company on Feb. 5 as senior vice president, Strategy & Business Development. Jones will report directly to CEO and President Eileen Drake and will serve as one of the officers of parent company Aerojet Rocketdyne Holdings. Jones brings more than 30 years of aerospace industry experience through strategic leadership roles at Orbital ATK, Orbital, The Boeing Company, and McDonnell Douglas. He most recently served as vice president of Corporate Business Development & International Programs for Orbital ATK. In his new role with Aerojet Rocketdyne, Jones will champion the company's long range strategic planning and growth initiatives, enhance customer alignment, and guide efforts to expand the business into new and adjacent markets.

#### **Koen Puimège Appointed Managing Director of Antwerp Space**

January 29, 2018 - Koen Puimège has been appointed Managing Director of Antwerp Space N.V., effective January 1st 2018. Koen Puimège has been working in the space industry for more than 22 years, holding positions in engineering, project management, operations management and business development before joining Antwerp Space as COO in 2015. Antwerp Space is a subsidiary of listed technology group OHB SE, is part of OHBs Business Unit Space Systems and provides expertise as well as system solutions for European space programs and commercial space applications worldwide. Antwerp Space develops complex on-board communication subsystems, flight equipment, Radio-science instruments and satellite ground control stations for the reception of data and control of spacecraft, as well as test systems used during the integration of satellites.

## REPORTS

### **A \$24 Billion Opportunity for Unmanned Aircraft Systems in Communications and Imaging**

January 4, 2018 - NSR's Unmanned Aircraft Systems (UAS) Satcom and Imaging Markets, 4th Edition report, projects a cumulative revenue opportunity of \$19.7 billion for UAS satellite communications and \$4.3 billion for commercial UAS imaging service during the 2016-2026 period owed to an accelerating Government and Military UAS market, with increased adoption rates for unmanned systems around the world. The demand for Intelligence, Surveillance and Reconnaissance (ISR), and combat capability is on the rise, due to global conflicts in the Middle East and Asia. Consequently, the 2016-2017 period notes a significant UAS supply increase from the U.S., China and Middle Eastern countries. This growth highlights the opportunity in satcom terminals and capacity services for both satellite operators and equipment manufacturers. The demand for Medium Altitude Long Endurance (MALE) airframes continues to outshine other satcom enabled airframes, and NSR projects more than 8,000 satcom in-service units by 2026, with MALE systems accounting for almost 75% of the market.

### **New NSR Report Projects \$19.4 Billion in Land Mobile Satcom Revenue by 2026**

January 10, 2018 - NSR's Land Mobile via Satellite, 5th Edition is the industry reference on land mobile satcom, offering a completely updated assessment with hundreds of graphs and thousands of data points. The report examines demand trends by region and globally, including trends driving growth and changes to occur in the land mobile via satellite market in the coming decade, for MSS, FSS, GEO-HTS and Non-GEO HTS markets. Detailed analysis of demand, revenues, and growth for handhelds, fixed voice, push-to-talk, consumer handheld form factors, hotspot devices, comms-on-the-pause (COTP), connected vehicles and SNGs are documented.

### **SSPI Releases Report, "How to Bring New Hires on Board"**

January 12, 2018 - The Space & Satellite Professionals International (SSPI) has released a new report, How to Bring New Hires on Board: From Promise to Purpose. In this 9-page report, written for anyone who manages talent for a living, SSPI distills lessons from some of the smartest and most experienced people in talent management about what every company, large and small, can do to maximize the chance for a new hire to become a permanent contributor, a high performer and even a leader of the pack.

### **Skills Shortage in the Agritech Sector Holding Back IoT Innovation, Finds Inmarsat**

January 16, 2018 - The potential for Internet of Things (IoT) technology to drive innovation, efficiency, and increased productivity in the agricultural sector is at risk, as agritech businesses must urgently upskill current employees and embark on recruitment drives to ensure they have the capabilities to deliver the technology. According to independent research commissioned by Inmarsat, while the vast majority of agritech companies are moving towards IoT, a significant proportion lack the staff and skills needed to take advantage of the technology.

### **WTA Reveals New "Teleport Opportunities 2018" Report**

January 25, 2018 - The World Teleport Association (WTA) released Teleport Opportunities 2018, a new research report. WTA surveyed teleport executives online in the fourth quarter of calendar 2017 to learn their views. They represented companies of widely varying size in different regions that served different market segments. The result is a portrait in numbers of the teleport sector's future as seen from the people making it happen.

### **In-Orbit Servicing Market Opportunity Exceeds \$3 Billion**

January 30, 2018 - NSR's industry-first In-Orbit Servicing Markets (IoSM) report finds the nascent in-orbit servicing market poised for growth, and forecasts a total market of over \$3B in the next 10 years. Life extension services drive most of this revenue, as many in-orbit service providers plan to enter the market in the next five years servicing commercial and government customers with additional solutions to fleet management.

## UPCOMING EVENTS

**SmallSat Symposium 2018**, 5-8 February, Silicon Valley, CA, USA, <https://smallsatshow.com>

**ABU Digital Broadcasting Symposium 2018**, 5-8 March, Kuala Lumpur, Malaysia, <http://dbs.abu.org.my>

**Convergence India 2018**, 7-9 March, New Delhi, India, [www.convergenceindia.org](http://www.convergenceindia.org)

Convergence India is the only platform in India which demonstrates convergence of technologies in Telecom, IT, Broadcast & Digital media sectors. The three-day exhibition and concurrent conference sessions provides an excellent networking opportunity for speakers, visitors and delegates. This platform attracts high quality exhibitors to showcase their expertise and identify the thriving business opportunities in India.

**Satellite 2018**, 12-15 March, Washington DC, USA, [www.satshow.com](http://www.satshow.com)

**Asia Pacific Maritime**, 14-16 March, Singapore, [www.apmaritime.com](http://www.apmaritime.com)

**Telecoms World Asia 2018**, 19-20 March, Bangkok, Thailand, [www.terrapinn.com/conference/telecoms-world-asia/](http://www.terrapinn.com/conference/telecoms-world-asia/)

**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.

**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](http://www.kobashow.com)

**Australasia Satellite Forum 2018**, 22-23 May, Sydney, Australia, [www.talksatellite.com/EVENTS.htm](http://www.talksatellite.com/EVENTS.htm)

**VIETNAM ICTCOMM 2018**, 7-9 June, Ho Chi Minh City, Vietnam, [www.ictcomm.vn/en/home](http://www.ictcomm.vn/en/home)

**CASBAA Satellite Industry Forum**, 25 June, Singapore, [www.casbaa.com/events/list/](http://www.casbaa.com/events/list/)

**CommunicAsia 2018**, 26-28 June, Singapore, [www.communicasia.com](http://www.communicasia.com)

**ConnecTechAsia 2018**, 26-28 June, Singapore, [www.connectechasia.com](http://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)



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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.apscc.or.kr](http://www.apscc.or.kr).*