

MRO

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America dreams

Company Profile
STS Component Solutions

MRO News
from around the world

People on the Move
latest appointments



MRO

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Opinion

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Boeing's cash cow in rate drop

As we went to press with this edition, reports began to trickle in that U.S. plane maker will cut production of its extremely popular twin-aisle 777 next year. There seems to be an overfill in the widebody market and its evident by the number of 777s ordered this year being nowhere near the figures recorded in 2014 and 2015.

As a result, Boeing reckons there is insufficient demand to justify maintaining the current production rate of seven 777s per month and will reduce production to five per month beginning in August next year.

The ink is still wet on a deal Boeing has signed with Iran Air for 80 aircraft which include 15 777-300ERs and 15 777-9s, but this will unlikely fill the gap in the immediate term. It's not yet determined how many positions will be affected as a result of the cut but its surely not going down well

in Everett as with the stock markets. Ultimately though, in order to keep the production line going difficult decisions have to be made – and it's not the first time. With the announced dividend increase it could more than offset the negative of the 777 rate cut. In any case it will be an interesting development to follow in 2017.

And on that note, as we come to the close of yet another busy year, it gives me great pleasure to wish all our readers, advertisers and editorial partners a very happy and cheerful festive season on behalf of the entire staff at AviTrader MRO. We hope to continue engaging with your various teams in 2017.

We wish you all a successful and profitable New Year.

Keith Mwanalushi
Editor



Demand for widebody jets is slowing.

Photo: Boeing

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**CONGRATULATIONS
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YEAR” FOR ITS
SUPPORT OF THE
USAF'S E-4B FLEET**





Final assembly of first 787-10 Dreamliner has started

Photo: Boeing

Boeing begins final assembly on first 787-10 Dreamliner

Boeing teammates in North Charleston, S.C., have started final assembly of the first 787-10 Dreamliner, marking yet another on-time milestone for the development program. The first 787-10 will cycle through Boeing South Carolina's Final Assembly facility as all major sections are joined, interior and exterior components completed, power turned on and production tests begun. The first 787-10 is expected to fly in 2017 and first delivery is scheduled for 2018. The 787-10 is the third member of the super-efficient, passenger-pleasing 787 Dreamliner family. As a stretch of the 787-9, the 787-10 will retain 95 percent commonality while adding seats and cargo capacity, setting a new benchmark for fuel efficiency and operating economics – 25% better fuel per seat and lower emissions than the airplanes it will replace. To date, Boeing has received 154 787-10 orders from nine customers.

TAG Aviation Farnborough Maintenance Services expands business aircraft interiors offering

TAG Farnborough Maintenance Services (TFMS), in conjunction with Zodiac VIP Business Aircraft Interiors (ZBAI), is now able to provide improved business aircraft interiors capabilities. Services range from smart repairs to discreet cabinet refurbishments and minor interior modifications. The range of products extends to furniture, carpets, seats and cabin periphery. "Developing our repair capabilities on aircraft cabin interiors is a logical addition to our already extensive suite of support services," said Cyrille Pillet, Vice President Maintenance Operations,

TAG Aviation Europe. "Partnering with Zodiac Business Aircraft Interiors is a real asset for our organization and has enabled us to combine the agility of TFMS with the strength and expertise of a renowned original equipment manufacturer." The Zodiac facility, which includes a new state-of-the-art spray booth, is conveniently located inside the aircraft hangar at TAG Farnborough. This helps to reduce turn-around-times and removes the risk of transit-induced damage, whilst enabling Zodiac's interiors experts to provide assistance and guidance to TAG's engineers during removal, installation and adjustment.

Pattonair secures new contract with Siemens Canada and Industrial Turbine Company

Global supply chain provider Pattonair has secured a new contract with Siemens Canada Limited and Industrial Turbine Company Limited. This is an extension of an existing relationship and continues Pattonair's affiliation for a further ten years. The contract is for the provision of C-Class parts for the Industrial RB211 and the Industrial Trent engines, serving the customer in Canada and the UK.

AirAsia contracts AFI KLM E&M for deployment of A320neo component support

AirAsia and AFI KLM E&M have inked a component support agreement for the airline's fleet of Airbus A320neo passenger jets, ultimately scheduled to number 304 aircraft. AirAsia took delivery of its first A320neo on September 7, this year in Hamburg. The con-

tract between the two groups includes component repair services and solutions designed to maximize aircraft availability, such as the provision of a local main base kit at AirAsia's Kuala Lumpur facility.

TAM secures two Saab 340B cargo conversion contracts

Täby Air Maintenance, TAM, has been selected by Scottish airline Loganair to convert two Saab 340B's to cargo configuration. This is a follow on to a previous, highly successful conversion of two Saab 340A's for Loganair. TAM has been approved by the US Federal Aviation Administration, FAA, as well as the European Aviation Safety Authority, EASA, to perform a full cargo conversion of Saab 340A and Saab 340B aircraft. The first aircraft, G-LGNM, is already at TAM's Örebro workshops, scheduled for delivery in mid-January 2017, with the second aircraft, G-LGNN, being delivered to TAM in early February.

Associated Air Center completes first BBJ Split Scimitar Winglets installation

Associated Air Center (AAC) has completed the company's first installation of Aviation Partners Boeing Split Scimitar Winglets for a U.S.-based Boeing Business Jet (BBJ) customer. The installation was completed after a scheduled yearly inspection at AAC's Dallas Love Field facility. The project included a wing trailing edge wedge installation and an outboard wing ballast installation. The winglets were modified at Aviation Partners Boeing facility in Wichita, Kansas. Subsequently, AAC reinstalled the winglets on the BBJ with the new ventral strake, completing the split-scimitar design. The installation is the first of several proposed winglet installations that AAC will be offering to their BBJ customers.

AEI to convert third MD-80 series passenger-to-freighter conversion for Everts Air Cargo

Aeronautical Engineers (AEI) will be converting a third MD-80 series passenger-to-freighter conversion for Fairbanks, Alaska-based Everts Air Cargo. The MD-83 aircraft (MSN 53079) will commence modification on December 19, and will be re-delivered to Everts Air Cargo in April 2017. Everts Air Cargo will use the MD-83SF for seasonal demand in Alaska, and on-demand business in North America. Commercial Jet's Dothan, Alabama facility will perform the modification and maintenance requirements on the aircraft.

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South African Airways extends TotalCare service for Trent 700 engines
Photo: Rolls-Royce

South African Airways signs US\$180m order to extend TotalCare service for Rolls-Royce engines

South African Airways has signed a new TotalCare service order, worth US\$180m, for Trent 700 engines that will power five Airbus A330 aircraft that are entering service. The aircraft are in addition to six A330s the airline already operates – all powered by the Trent 700 with TotalCare. The engines are assembled at Rolls-Royce's facility in Derby, UK.

STS to expand line maintenance

STS Line Maintenance, a division of STS Aviation Group, will open aircraft maintenance stations in Boston, Burbank, Denver, Newark, New York (JFK), Orlando, Minneapolis, Omaha, Phoenix and Ft. Myers, following HAEKO Americas Line Services' announcement earlier this year that it would close its stations at those airports by December 31st. STS Line Maintenance plans to retain most of each station's existing workforce, though new jobs for line maintenance technicians of varying skills and disciplines are now available at multiple locations. With the addition of these new stations, STS Line Maintenance will now operate out of 24 major U.S. Airports and offer round-the-clock aircraft maintenance services to airline customers at each station.

Air India signs four-year contract with Lufthansa Technik on landing gear maintenance and repair

Air India and Lufthansa Technik have entered into an agreement for the maintenance and

repair of the carrier's Boeing 777-200/300 landing gear. The four-year contract covers a total of 15 shipsets. The maintenance and overhaul work will be performed by Lufthansa Technik Landing Gear Services UK (LTLGS), located in Hayes, London, in the UK. The first Boeing 777-200/300 landing gear delivery to Air India also marks an important milestone for LTLGS – the 50th Boeing 777-200/300 landing gear overhaul by LTLGS since 2013. This amounts to a market share of approximately 70% in the currently anticipated global market.

Lufthansa Technik and DC Aviation Group perform first A-Check in Dubai

Based on a cooperation agreement from May 2016, Lufthansa Technik and DC Aviation Group have recently performed the first A-check for a narrow-body aircraft at Al Maktoum International Airport (Dubai World Central Airport) in Dubai. The services were provided for an Airbus A319 of an undisclosed customer from the region in the hangars and VIP facilities of DC Aviation Al-Futtaim LLC, a joint venture of DC Aviation and the Al-Futtaim Group. The workscope of about 350 hours included the check of all systems which are relevant for flight safety, the exchange of several components, the completion of service bulletins and as a special topic, the test of the ram air turbine. As part of the cooperation agreement, the product portfolio consists of regular checks as well as maintenance services, including unplanned repairs, for example in the case of an AOG (Aircraft on Ground). It also features services for aircraft cabins, including small modifications. Moreover, plans call for a mobile aircraft and cabin service to serve the region.

Lufthansa Technik and GE select Poland as joint venture site

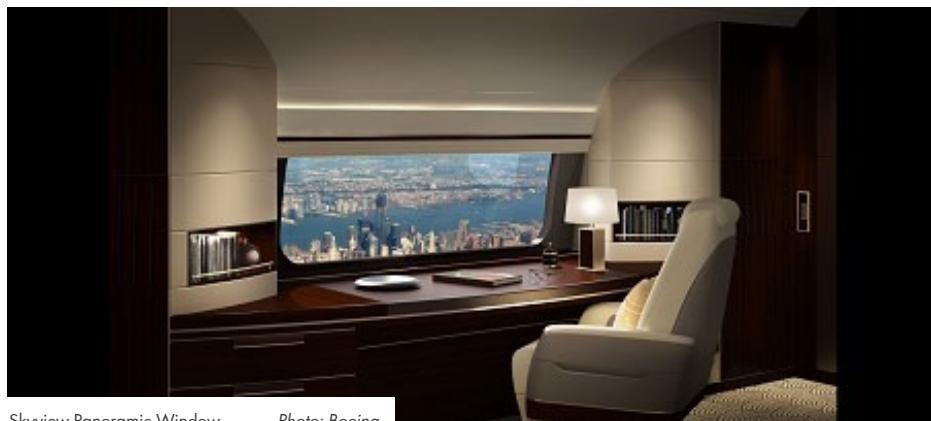
Lufthansa Technik and GE have selected the Legnica Special Economic Zone in Środa Śląska, Poland as the site for their maintenance, repair and overhaul (MRO) joint venture for GEnx-2B and GE9X engines. The joint venture, called XEOS, will invest about US\$267m in the new facility. Ground breaking on the 350,000 ft² facility will begin in Spring 2017, and the facility will open in September 2018 with capability to repair GEnx-2B engines that power the Boeing 747-8 aircraft. MRO capabilities for the GE9X, which powers the Boeing 777X aircraft, will be available in 2021. Employment will begin at about 220 and grow to about 500 employees at full capacity. The Legnica Special Economic Zone (LSEZ) was selected due to its development potential, economic competitiveness and government support. Moreover, the availability of a highly-skilled workforce was also a key factor in the decision. An intensive cooperation is planned with the Wrocław Institute of Technology and the local technical schools to help train current and future generations of employees for the joint venture.

Precision Aircraft Solutions completes 6th conversion for DHL Express

Precision Aircraft Solutions has reported the completion of its sixth Precision conversion of the year for European Air Transport Leipzig Airline (EAT), the largest of three airlines with dedicated service to the European, Middle Eastern and North African networks of DHL Express. Conversion of the 757-200 aircraft, MSN 29946, was performed at Flightstar in Jacksonville, Fla.

UK's Eastern Airways joins Embraer's Pool Program

Eastern Airways, the most recent operator to join the E-Jet family, has signed a Flight Hour Pool Program contract. The pool agreement, for up to six years, covers more than 300 part numbers for Eastern Airways' two recently acquired E170 jets. The airline, based in the UK, also operates three Embraer ERJ 145 jets. Embraer's Flight Hour Pool Program, which is currently supporting more than 65% of E-Jets customers worldwide, is designed to minimize airlines' up-front investment in high-value repairable inventories and resources, while taking advantage of Embraer's technical expertise and its vast component service provider network.



Skyview Panoramic Window

Photo: Boeing

Boeing Business Jets, GKN Aerospace introduce Skyview Panoramic Window

Boeing Business Jets will work with GKN Aerospace's Fokker business to develop, produce, offer and support the Skyview Panoramic Window, the largest window available on any passenger jet offered today. The window will be available as a feature on the BBJ, BBJ 2, and all three members of the BBJ MAX family – including the new BBJ MAX 7 – with scheduled entry-into-service in 2018. The Skyview Panoramic Window, measuring approximately 4.5 feet by 1.5 feet (1.4 x 0.5 m), is created by effectively joining three existing 737 windows together. Situated aft of the wing, with multiple potential locations based on the airplane type, it offers customers an unparalleled perspective of the world.

FL Technics officially opens MRO centre in Jakarta

FL Technics has officially opened its MRO hangar at Soekarno-Hatta International Airport, Jakarta, Indonesia. FL Technics Indonesia has also reached cooperation agreements

with ten Asian airlines. The newly opened 9000 m² facility accommodates up to three narrow-body aircraft at a time and is certified to service the Boeing 737 NG and CL, as well as the Airbus A319/A320/A321. FL Technics Indonesia's team starts its operations with aircraft line maintenance, while base maintenance services are to be introduced in 2017.

AFI KLM E&M inaugurates new Kuala Lumpur Materials and Logistics Service Center

AFI KLM E&M inaugurated its new Kuala Lumpur Materials and Logistics Service Center on December 1. The facility is designed to better serve the MRO's client airlines throughout the region. A first warehouse had been deployed in 2011 as part of the Boeing Next-Generation 737 component service agreement between AFI KLM E&M and Malaysia Airlines. As of 2013, the center began gradually taking care of additional customers. The new logistic service center works in close coordination with the Singapore logistic center as well as local Component facilities in Shanghai

and Mumbai. It beefs up the Group's logistics capabilities in the Asia-Pacific region and will become one of the decentralized logistic centers of AFI KLM E&M to service customers with all aircraft types for which AFI KLM E&M provides component services, including the 737, 787 and A320, A330, A350 and A380. The new logistic service center is first and foremost a logistics facility and as such will serve as a local spares pool to fast-track the supply of replacement parts. It will also act as a client interface, and its staff will, as a result, be able to deliver rapid solutions to the needs of client airlines. Through its strategic positioning at the heart of the Asia-Pacific region, it provides real 24/7 worldwide coverage, which will help deliver ever-more effective component support for AFI KLM E&M clients, with optimized parts storage, logistic and repair costs.

Skyways Technics becomes new member of the ATR MRO Network

Skyways Technics, based in Sonderborg, Denmark and specializing in aircraft maintenance, repair and overhaul (MRO), has joined its network of recommended aircraft maintenance centers. In an agreement signed on November 30 between ATR and Skyways Technics, the firm commits to offer maintenance solutions in full compliance with the fundamental and comprehensive customer service rules defined by ATR. Launched in 2012, this MRO network already includes maintenance and service providers based in Asia, Latin America and Europe. The MRO network is an essential part of the regional policy deployed by ATR, which aims to offer high-quality local solutions to its operators for maintenance, logistics and training. Founded on the basis of Cimber Air Maintenance Center A/S, MRO of one of the first ATR operators in Europe, Skyways Technics has over 30 years of maintenance experience on ATR aircraft.



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from left to right: Benoit Defforge President ACJ and Robert Smith President Jet Aviation
Photo: Airbus

Jet Aviation Dubai joins ACJ service center network

Jet Aviation's maintenance, repair and overhaul (MRO) facilities in Dubai are to join the ACJ Service Centre network, adding to the choice of Airbus-approved facilities around the world for ACJ customers and operators. Its Basle facilities became part of the ACJ Service Centre Network earlier this year. The expanded network comprises companies that are owned or controlled by Airbus, as well as independent ones that it has approved. Its capabilities include line and heavy maintenance, cabin-refurbishing, and cabin and system upgrades. The ACJ Service Centre network now comprises Comlux America in Indianapolis, HAEKO Private Jet Solutions in Xiamen, Jet Aviation in Basle and Dubai, Sepang Aircraft Engineering (SAE) in Kuala Lumpur, and ST Aerospace in Singapore. It will grow to include others over time.

UK's Eastern Airways joins Embraer's Pool Program

Eastern Airways, the most recent operator to join the E-Jet family, has signed a Flight Hour Pool Program contract. The pool agreement, for up to six years, covers more than 300 part numbers for Eastern Airways' two recently acquired E170 jets. The airline, based in the UK, also operates three Embraer ERJ 145 jets. Embraer's Flight Hour Pool Program, which is currently supporting more than 65% of E-Jets customers worldwide, is designed to minimize airlines' up-front in-

vestment in high-value repairable inventories and resources, while taking advantage of Embraer's technical expertise and its vast component service provider network.

Marshall Aerospace and Defence Group signs MoU with Cranfield Aerospace Solutions

Marshall Aerospace and Defence Group has signed a memorandum of understanding (MoU) with Cranfield Aerospace Solutions, owned by Cranfield University. The MoU covers collaboration in various aspects of aerospace and aviation engineering, including concept, design, IP, conversion, modification, manufacture, test, operation, installation, certification maintenance, support and training. In addition to this, the MoU encourages the establishment of joint working groups to examine and define proposals for joint programs in the areas decided upon by both businesses.

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Air Austral renews contract with AFI KLM E&M for 777 fleet support

After signing an agreement in February covering extended support for Air Austral's 787s, AFI KLM E&M and the Réunion-based airline have closed a deal for total care for the carrier's Boeing 777s, which are already receiving AFI KLM E&M support. The services covered by the contract include airframe/engineering maintenance, plus engine, APU and component services, together with additional support services for phase out/phase in operations. Component services support will be carried out under the joint AFI KLM E&M and Boeing 777 Component Services Program (CSP). AFI KLM E&M and Air Austral have worked together for close to ten years, especially on support for the Réunion carrier's 777s.

Monarch Aircraft Engineering signs line maintenance support contract with Olympus Airways

Monarch Aircraft Engineering Limited (MAEL), the engineering division of Monarch, has signed a line maintenance technical handling agreement with Olympus Airways. Commencing this month, MAEL's experienced engineering teams will be providing line maintenance technical handling to Olympus Airway's Airbus A320 family charter operation at the UK's Luton, Birmingham, Gatwick, Manchester airports, and Kiev airport in Ukraine.

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Comlux develops new Aux Center Tank System for A321
Photo: Airbus

Comlux develops new auxiliary center tank system for Airbus A321

Comlux has launched a new Forward Auxiliary Center Tank System for the Airbus A321. The new system will allow VIP operators to realize a range increase of up to 500nm (25 pax) while commercial operators can expect up to 300nm (160 pax). In collaboration with Airbus specialists, Comlux Engineers developed this new design to complement the two existing Airbus Additional Center Tanks (ACTs). The design offers a light

weight, optimized, yet cost-efficient solution for the A321 platform, ensuring minimized downtime for installation. The system is scheduled to be completed and ready for installation on the first ACJ321, 15 months after program initiation, which corresponds to Q3 2017. As 40% of all A321s are provisioned with ACTs, there are already clear potential candidates who would benefit from this option of more range, including various major airlines. "We have been evaluating for a while now this improvement initially for VIP customers and we decided to do it

with an industrial approach which will best serve the VIP and Airline markets. Developing such kind of industrial improvement is part of our core business and Comlux America is tailored to engineer and perform the installation of these additional ACTs" stated Arnaud Martin, EVP Operations at Comlux "We are grateful to Airbus for its strong support in developing this great new system for the A321 series aircraft."

CTT Systems receives Zonal Drying order for 7 Boeing 737NG-800S

CTT Systems AB, a market leader in aircraft humidity control systems, has announced a Zonal Drying order for 7 Boeing 737NG-800s to be line fitted in new aircraft, with deliveries between March 2017 and July 2017. Peter Landquist, VP Sales & Marketing, CTT Systems AB, commented: "We are privileged to receive another order from Transavia, a customer valuing the benefits of mastering the root-cause of fuselage condensation from the very first operation. Hereby, the new aircraft will not gain weight from accumulated water/ice accretion (which increase fuel and CO2 burn) and it will not experience moisture problems, such as electrical failures, which increase cost."



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The first 737MAX thrust reverser with inner wall, undergoing tests
Photo: Spirit AeroSystems

Spirit AeroSystems delivers first 737 MAX thrust reverser with composite inner wall

Spirit AeroSystems has reported the completion of an expansion project on the Spirit Wichita campus to support production of the 737 thrust reverser. The expansion supports production rate increases already planned for the Boeing 737 program. The company also celebrated delivering the first 737 MAX thrust reverser with the new composite inner wall to the flight test program. Spirit produces the 737 MAX fuselage, pylon, thrust reverser and engine nacelle at its Wichita, Kan., facility, and the wing leading edges at its Tulsa, Okla., facility. Spirit is responsible for delivering about 70% of the 737 structure to Boeing. Spirit is using a proven composite inner wall material, providing Boeing with a maintainable, producible and reliable solution for the 737 MAX. The new design includes a thermal protection system, which provides reliable protection from the heat generated by the new fuel-efficient Leap-1B engines made by CFM International. The 737 MAX is 20% more fuel efficient than the original Next-Generation 737. The 737 MAX will extend the Next-Generation 737 range advantage with the capability to fly more than 3,500 nautical miles (6,510 kilometers), an increase of 340 to 570 nautical miles (629 to 1,055 kilometers). Delivery of the first 737 MAX is scheduled for the first half of 2017.

Irtech Aviation Services awarded EASA Part 145 Composite Repair Approval

Irtech Aviation Services has been awarded EASA Part 145 (I.145.074) Composite Repair Approval C8 and C20 rating mak-

ing Irtech the first independent composite repair facility in Ireland. The approval permits Irtech to perform certified composite repairs on a range of structural aircraft components including ailerons, spoilers, winglets and wing-to-body fairing. The new approval extends across the following aircraft types; B737 Series, B757 Series, B767 Series, A320 Series and A330 Series. The EASA Part 145 Composite Repair Approval augments Irtech's extensive portfolio of services including EASA Part 21J Design (DOA), EASA Part 21G Production (POA), EASA (Part M and Subpart G and I) CAMO Continuing Airworthiness Management, Technical Services and Material Procurement. The Irish-headquartered company is recognized as one of the world's leading specialist aircraft services companies and the addition of EASA Part 145 Composite Approval augments its overall client offering.

EDM's A320 Door Trainer for China Southern Airlines passes Factory Acceptance Test

EDM, a leading global provider of training simulators to the civil aviation and defense sectors, has reported that the extended A320 Door Trainer it manufactured for China Southern Airlines has passed its Factory Acceptance Test (FAT) earlier this month. Designed and built at EDM's facility in Manchester in the UK, the A320 Door Trainer will enable China Southern Airlines' cabin crew to be fully trained in the proficient operation of this aircraft door type under all normal, abnormal and emergency

conditions. The door trainer comprises of a fully functional main door and attendant seats as well as features including a door mode selector, integrated door training malfunctions, gust lock, manual slide inflation handle, door assist handles, simulated audio sounds and exit lighting. Business class seats, overhead lockers and a Passenger Service Unit (PSU) are located in the extended area of the door trainer. The simulator is controlled via an intuitive, easy to use Instructor Operator Station.

Endorsement from Canada as 328 Support Services GmbH wins TCCA approved status

328 Support Services GmbH (328), has been endorsed by Canada's Transport Canada Civil Aviation (TCCA) with the award of broad maintenance approval. It allows 328 to undertake modifications and repairs on any Canadian-registered Dornier 328 aircraft, from avionic installations to complete aircraft conversions. The approval also enables 328 to distribute new, used or repaired Dornier 328 spare parts to Canada. With the new approval in place, spare parts and appliances will be delivered to Canadian customers under an EASA Form 1 "triple release" which means that they will be certified under EASA, FAA and TCCA regulations.

Lufthansa Technik re-delivers second completed BBJ to Royal Jet

The completion specialists in the Lufthansa Technik VIP & Special Mission Aircraft Services division have re-delivered the second Boeing Business Jet (BBJ) to Royal Jet, the leading VVIP charter operator in the Middle East. Like the first aircraft, which was re-delivered in October, the second completion was finished on time after just nine months at Lufthansa Technik's Hamburg location. The unique and innovative cabin was designed by New York-based designer Edése Doret and is characterized by a clear, minimalist esthetic style, equally combining geometric shapes and organic structures. The dominant cabin elements were produced from modern materials, such as genuine carbon fiber, as well as metal and plastic surfaces. The two aircraft also set new standards in the area of connectivity. These two are the first BBJs to be fitted with the Ka-band antenna system as part of their initial completion. The new system allows high-speed Internet and TV connections of a standard you would get at home.



Flying Colours anticipates a growth in the number of SDRs it will install as it works on an increasing number of large-cabin long-range jets
Photo: Flying Colors Corp.

Flying Colours rolls out Satcom Direct Router installations

Flying Colours Corp. has completed its first installations of the Satcom Direct Router, (SDR). The first was fitted as part of a Global 5000 cabin refurbishment package, and the second as part of a new Global 5000 completion project for an undisclosed private Middle Eastern owner. Whilst crew and passengers on this aircraft are already benefiting from the SD services, including the Global VT option, the aircraft is now expected to return to the Flying Colours Peterborough facility in early 2017 to have the supplemental SD Wi-Fi Hub installed. This will add functionality to, and augment the performance of, the existing SDR. This is the first time Flying Colours will have fitted the complete suite of SD router options onto an aircraft. Flying Colours Corp. has been a reseller for Satcom Direct products for over three years, and these initial installations serve to strengthen the existing relationship with the Florida-based company. It is anticipated that further SDR installations will come online as the number of large-cabin, long-range aircraft move through the Flying Colours facility increases.

E195-E2 Wing Box ready for assembly

In the pursuit of maximum efficiency on the E2 platform, each E-Jet E2 has its own optimized wing. The E195-E2 wing has the highest aspect ratio (one measure of aircraft fuel efficiency) among single-aisle jets. The new wing also means a new wing box. The wing and wing box are examples of the "Smart" approach to designing the E2. By choosing the optimal combination of materials, E2 wing structure weighs less, costs less to maintain, and is sized for each aircraft to maximize efficiency for the load it is designed to carry.

MTU Maintenance signs exclusive contract with Air Europa

MTU Maintenance and Spanish airline Air Europa have signed an exclusive seven-year contract for the maintenance, repair and overhaul (MRO) of the airline's CF34-10E engines. The contract between MTU Maintenance and Majorca-based Air Europa includes shop visits, on-site services, and lease support as part of a customized solution tailored specifically to the airline's needs. The contract is valued at approximately US\$120 million and covers the 24 engines, including spares, used on the airline's 11 E195 aircraft. The activities

will be carried out by MTU Maintenance Berlin-Brandenburg, the MTU Maintenance division's specialists for the CF34 family.

TAG Aviation completes first 120-month inspection on Global Express aircraft

TAG Aviation Maintenance Services Europe has completed its first 120-month inspection on a Global Express aircraft. The 120-month inspection project – which was completed in August and has been carried out at TAG Farnborough's Maintenance Services Centre – included a full strip and repaint of the aircraft's livery, a SwiftBroadband upgrade and a cabin refurbishment which was undertaken at TAG's Maintenance Services Centre in Geneva. As the largest maintenance event to be undertaken on a Global Express, the 120-month inspection ensures a thorough examination of the aircraft airframe – the cabin interior must be completely removed for access to facilitate the inspection which makes it an ideal time to perform any avionics upgrades, such as SATCOM, that requires such access. The 120-month inspection also included a major overhaul of the landing gear and the aircraft's in-cabin connectivity has received an upgrade to SwiftBroadband with a new Satcom Direct Router – which includes Global VT, Aero XR and Sky Ticket – all supplied by Satcom Direct.

Flying Colours delivers two CRJ aircraft conversions to Malaysia's Resorts World

Flying Colours Corp., the North American MRO, completion and refurbishment specialist, has delivered two CRJ 200 aircraft conversions to Resorts World of Malaysia. The CRJ200 regional airliners have been converted from regular airline format to corporate shuttle configuration and will be used by Resorts World to transport customers between its leisure resorts in Malaysia. The Resorts World shuttles feature a 16-seat layout with eight business jet seats on each side.

Finance News

Satcom Direct completes acquisition of TrueNorth Avionics

Global aeronautical communications provider Satcom Direct (SD) has closed its purchase of TrueNorth Avionics, a manufacturer of cabin communications solutions. With the acquisition of TrueNorth complete, SD significantly expands its ability

to provide advanced communications systems for VIP and VVIP aircraft. Ottawa, Canada-based TrueNorth Avionics designs, develops and manufactures satellite communications solutions for aircraft operators and avionics OEMs. TrueNorth will become a business unit within the SD family of companies focused on advanced avionics development.

FLYHT Aerospace achieves CAAC Part-145 approval

FLYHT Aerospace Solutions has been granted CAAC Part-145 approval by the Civil Aviation Administration of China (CAAC). The approval took almost two years to achieve and now allows FLYHT to repair Automated Flight Information Reporting System (AFIRS) units and return them to customers in China with an AAC-038 release certificate. The AAC-038 is a maintenance release document that allows for AFIRS 228 installation on Chinese-registered aircraft under the CAAC Part-145 approval. Previously, FLYHT supplied new units for warranty exchange, so this approval will improve efficiency and convenience for Chinese customers by allowing units to be repaired and returned.

Rolls-Royce confirms valuation of outstanding shareholding in ITP

Rolls-Royce confirmed the valuation of €720m (US\$763m) for the 53.1% shareholding in Industria de Turbo Propulsores SA (ITP) currently owned by SENER Grupo de Ingeniería SA. This follows completion of due diligence, subsequent to the announcement in July, 2016, that Rolls-Royce will purchase the outstanding stake. Under the agreement, consideration will be settled over a two-year period following completion in eight evenly spaced instalments of equal value. The updated agreement allows flexibility to settle the consideration either in cash, in the form of Rolls-Royce shares, or any mixture of the two, as preferred by Rolls-Royce. A decision as to whether each payment will be settled in cash, shares or cash and shares will be determined by Rolls-Royce during the payment period. The acquisition of ITP strengthens Rolls-Royce's position on its civil aerospace large engine growth programmes by capturing significant additional value from long-term aftermarket revenues, including on the high-volume Trent 1000 and Trent XWB engine programmes where ITP has played a key role as a risk and revenue sharing partner.

AerCap announces closing of new US\$0.6bn credit facility

AerCap Holdings has completed the closing of a new US\$0.6bn secured credit facility. The facility will primarily be used to acquire new narrow-body and wide-body aircraft as they deliver from Boeing and Airbus through 2017. The facility was signed to finance a portfolio of eight aircraft and matures in 2024. The total amount of financing transactions completed to date in 2016 is US\$3.5bn.

Dutch private equity firm Antea invests in APOC Aviation

Dutch private equity firm Antea has acquired a 30% stake in Aircraft Part-Out Company Europe B.V. (APOC Aviation). APOC Aviation is located in Delft, the Netherlands. It is engaged in the supply of spare parts for the aircraft industry. The company purchases aircraft that have been taken out-of-service, outsources the disassembly and then sells the parts. It specializes in both the Airbus A320 and Boeing 737. APOC Aviation was founded in 2014 and has since established itself as a known player in the aircraft part-out market. For the coming years, it expects to realize further substantial growth. The underlying trend that facilitates this growth is the increase in air traffic, particularly in Asia, where both Airbus and Boeing have a significant order book. In addition, the second-hand market in aircraft parts continues to mature. With the rise of low cost airlines, competition has increased, making the airlines more conscious of cost reduction. As the difference in price between a new and a used spare part is considerable, virtually all airlines currently make use of used parts for maintenance or repairs. APOC Aviation will benefit greatly from this continuing upward trend. Remaining shareholders are the founder/director of APOC Aviation (55%) and a group of informal investors (15%). The investment in APOC Aviation entails the sixth investment for fund VII of Antea since the start of the fund in 2015.

Information Technology

GE Aviation has signed a contract, to provide Flight Analytics, with **All Nippon Airways**. Flight Analytics will help improve fuel efficiency based on an analysis of flight data. This is the first-time GE is providing digital solutions to the Japanese market. ANA operates more than 1,000 international and domestic flights every day, and its fuel-related cost totaled approximately JPY300bn (US\$2.6bn) for the fiscal year of 2015. The introduction of GE's Flight Analytics has the potential to reduce the airline's fuel cost up to 1% annually. Analyzing flight data via flight analytics makes it possible to keep track of fuel consumption over the course of the entire flight—from takeoff to landing—and can provide support to pilots on how to efficiently operate aircraft. The solution generates data including appropriate amount of fuel that needs to be stored on board. This enables airlines to improve operational flexibility.

AVTECH, a Swedish IT company specializing in the aviation industry, is the developer of the Aventus NowCast system, a product

that enables airlines to save on fuel thanks to algorithms that provide more precise wind data for airplanes' navigational computers. Aventus NowCast, currently distributed in co-operation with the **British Met Office**, has been available on the markets since 2000 and is used by several major airlines, including **Southwest Airlines**, **Lufthansa Cargo** and **easyJet**. Despite digital advancements, the possibility of distributing weather data in real time to cockpits has been, until now, limited by regulations and ambiguous standards. AVTECH's next step in development, Aventus SIGMA, is partly based on the technology of Aventus NowCast and can, as a result, be added to the NowCast service as an add-on module. SIGMA combines the airplane's accessible data with real-time data from the Met Office. SIGMA assists pilots in making better decisions concerning which flight path to take and the ideal altitude, which enables them to avoid problematic weather phenomena such as turbulence, ice build-up, thunderstorms and thunderclouds. Cockpit routines are simplified when complex data

is presented in a more concrete form. In addition to a general flight weather forecast, SIGMA takes into account the actual flight path and flying time of the plane. Today, planes that are delayed or are required to select an alternative flight path for some reason are forced to use historical weather data, while SIGMA continuously provides real-time weather data for the actual route.

Falcon Aviation has implemented **Rockwell Collins'** ARINC LocalCheck, Local Departure Control System (L-DCS) to automate the check-in process for the company's fleet of helicopters and corporate jets. Falcon Aviation provides a host of aviation services, including private jet and helicopter charter, aircraft management and aircraft maintenance and support, to customers throughout the Middle East from

its base at Al Bateen Executive Airport, the premier VIP airport in the United Arab Emirates. Rockwell Collins' ARINC LocalCheck improves Falcon Aviation's check-in and boarding efficiency by automating passenger handling and the production of barcoding bag tags for positive identification and passenger reconciliation.

Other News

AAR has reported the certification of the **ISU (Internal Airlift/Helicopter Slingable Container Units)** 56000 series on commercial Boeing 747 aircraft. With the certification, these containers are now recognized as a size code B Unit Loading Device and are no longer required to be netted. The third generation 56000 Series ISU Container is the mainstay for military rapid deployment forces. ISUs can be kitted and configured to meet unique user mission requirements and serve virtually any cargo deployment need. The elimination of netting and tie downs decreases the man-hours needed for loading and unloading, and reduces the cost of ownership to transport and store. "This certification allows AAR Mobility Systems to meet the growing demand across the world for air cargo capabilities within the commercial and military sectors," said Jeff Jackson, Vice President of Sales and Marketing, AAR Mobility Systems. "It also allows our military the flexibility to use commercial aircraft as necessary to augment their current capabilities."

GA Telesis, has launched ACCESS (Aircraft Control Exchange Support Solutions). ACCESS is a new ready-to-go exchange program for aircraft flight control surfaces. ACCESS connects airlines to its extensive pool of ready-to-go flight control surfaces, leveraging the world's largest independent inventory of the GA Telesis' Component Solutions Group (CSG) with the comprehensive repair and overhaul capabilities of GA Telesis' Composite Repair Group (CRG). The new program offering will initially focus on operators of the Airbus A320 series fleet, the Airbus A330 and the Boeing 737NG family. The company has already entered into a launch agreement that will commence in Q1 2017 with a major US airline.

Jeppesen has signed a three-year renewal agreement with **Flybe**, a European regional airline, to provide digital charting and electronic flight bag (EFB) services for the carrier. Flybe will also receive Fuel Dashboard services to optimize fleet-wide fuel consumption and Electronic Flight Folder tools to enhance day-of flight EFB operations. Jeppesen had previously helped Flybe gain paperless operating authorization from the UK Civil Aviation Authority, using Jeppesen FliteDeck Pro on iPad as their EFB platform.

As part of the integration measures and streamlining of the company's organizational set-up, **Airbus Group** envisages a progressive reduction of its current workforce of around 136,000 by a maximum of 1,164 positions. These reductions will mainly affect support and integrated functions as well as the **CTO organization**. The merger will also conclude the company's headquarters move from Paris and Munich to Toulouse, accompanied by the transfer of 325 positions. At the same time, Airbus Group is preparing for the future by continuing to invest in developing core competences; around 230 positions will be created to secure critical skills needed for the company's way ahead in the era of digital transformation. Airbus Group targets mid-2017 for an agreement on appropriate social measures in line with regulations and company agreements. Voluntary departures, redeployments and early retirements are part of the measures to be discussed. As previously announced, Airbus Group will thoroughly consult with its social partners on each of the necessary next steps. At the end of September 2016, Airbus Group announced it will merge the group structure with the largest division, **Airbus Commercial Aircraft**, as of January, 2017. In this new set-up, the company will retain **Airbus Defence and Space** and **Airbus Helicopters** as divisions.

After boosting its technical expertise, **AJW** has successfully relocated its Engine Division and strengthened the level of support given to customers. This transition from Merthyr Tydfil in Wales to its group headquarters near London Gatwick has enabled AJW Engines to integrate with the technical and sales teams at AJW's group headquarters, enhancing service levels and extending its capability to support customers with a range of tailored and flexible solutions. Daniel Watson, Chief Commercial Officer, AJW Group, said: "The relocation is a strategic decision designed to ensure our customers are best supported by AJW's technical expertise, world-class AOG service and award-winning logistics team and pave the way for growth. The team is now in place and fully integrated into our wider operations at group headquarters. "To confirm our commitment to the engines division, our investment in stock and in a move to further increase our offering, AJW has recently acquired a CFM56-5B engine for teardown and a range of V2500 and CFM56 LLPs.

Flight simulator manufacturers **Softeksim** and **SimHelp**, the ultimate flight simulator maintenance solutions provider, have announced their cooperation, in the framework of which, SimHelp has become a partner and official provider of Softeksim flight training devices. On the basis of the partnership, SimHelp sells the flight training devices manufactured by Softeksim. Furthermore, the company will provide high-quality sales support and service to a wide range of customers around the world, including FTO schools, universities, and other flight training organizations. According to Mr. Ruslans Usarovs, the CEO of Softeksim, the business cooperation with SimHelp is the guarantee to ensure and deliver the best experience as well as support for customers. SimHelp is a part of the global aviation training provider BAA Training. Also, SimHelp's operations and expertise are backed up by Avia Solutions Group – the strongest and the WSE-listed aviation infrastructure group in Central Europe. Consequently, SimHelp can deliver not only high-quality customer support, but also the know-how when choosing the best solution for a flight training device.

Advanced Ceramic Coatings (ACC), a 50/50 joint venture between **GE Aviation** and **Turbocoating Corp.**, has selected Duncan, South Carolina, as the location for its new environmental barrier coating facility for jet engine components. Formed in 2014 and headquartered in Hickory, North Carolina, ACC combines Turbocoating's proprietary coatings technologies and industrial processes with GE Aviation's coatings processes developed specifically for ceramic matrix composite (CMC) material to produce advanced coatings for GE's high-temperature CMC components in the latest generation of jet engines. The new 62,500 sq.ft. facility will begin operation in the 3rd quarter of 2017.

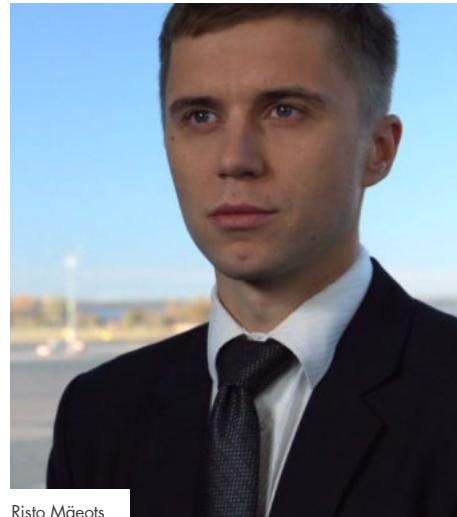
People On The Move



Anne Brachet



Kevin G. McAllister



Risto Mäeots

Anne Brachet has been appointed Executive Vice President, AIR FRANCE KLM Engineering & Maintenance. She takes over from **Franck Terner**, appointed as Air France Chief Executive Officer on November 2. Anne Brachet will pursue the AFI KLM E&M strategy and drive its growth in the service of AIR FRANCE KLM Group airlines and third-party client airlines.

Boeing Chairman, President and CEO, **Dennis Muilenburg**, has named **Kevin G. McAllister** President and CEO of Boeing Commercial Airplanes, succeeding

company Vice Chairman **Ray Conner** in that role. Muilenburg also appointed **Stanley A. Deal** President and CEO of Boeing Global Services, a new business unit to be formed from the customer services groups within the company's existing commercial airplanes and defense, space and security business units. McAllister joins Boeing from GE Aviation. Deal is a veteran Boeing executive.

The Magnetic MRO, Estonia-headquartered Total Technical Care company, announced upcoming changes in its leader-

ship team. From December 1, 2016 **Risto Mäeots** will be promoted from his current Chief Operating Officer position to the Chief Executive Officer position and will resume responsibility for overall company direction. Incumbent company CEO **Jonas Butautis** will become the Chairman of the Management Board, supporting Risto Mäeots with the transition and also guiding group-level M&A, asset management, and strategic projects activities.



The North American fleet will grow in the low single digits in the coming years.
Photo: Airbus

As the United States transitions to a new government there are promises of rebuilding the country's aviation infrastructure. **Keith Mwanalushi** looks at what's ahead for the MRO sector.

Donald Trump's presidential campaign was marked by a combination of populism, nationalism and protectionism. Aviation policy has typically not featured high on the priority list of prospective presidential candidates but Trump's promises on aviation were right up there aiding to drum up support for his election winning campaign.

Interestingly, Mr Trump's campaign expressly attacked Norwegian Airlines International's moves to operate into the US. (Which has now been granted permission). The often-misplaced arguments fell squarely into the category of appealing to voters concerned for their jobs, and who see all the perceived negatives of foreign trade.

With a new Trump administration in the U.S. there have been some global concerns of a likely reversion to protectionism in the U.S. compared to the current trend of globalisation.

"Increased protectionism will likely lead to turbulence as the American MRO industry is a true global industry," Alvin Khoo CFO at GA Telesis foresees. "As the home to many, if not most of the world's component manufacturers as well as the world's largest base of MROs, airline customers from all over the world send their assets to the USA to utilise MRO services. Protectionism may also lead to other countries taking similar positions creating unnecessary global friction," Khoo cautions.

Brian Neff from Fort Lauderdale based CTS Engines is relatively optimistic on the impact of a Trump administration, with the obvious

qualifications regarding trade barriers. Neff says as with all successful members of the global MRO community, CTS has benefitted from free trade, and oppose any unnecessary restrictions. "That being said, we are very happy to hear that the Trump administration intends to reduce the regulatory burden on small to mid-size companies, which has grown greatly over the past 16 years. So we have adopted an eyes open approach with a hope for the best," Neff aspires.

AAR Corp say they provide good-paying jobs for over 3000 American workers at the six facilities in their MRO network, which are all located in the United States. "Airlines that have their heavy maintenance and modifications done by AAR are supporting U.S. jobs," declares Dany Kleiman, Vice President and General Manager of MRO at AAR.

AAR is investing strategi-



The MRO market seems a low priority target for the Trump administration.
Photo: Michael Vardon



Lopez - The challenge for the industry is to be disciplined about capacity matching demand.

Photo: PEMCO

expect positive outcome of any regulation that will level the playing field across the world," he comments.

Aviation will continue to be a global industry, irrespective of America's political landscape. Larry Montreuil VP Asset Management and Business Development believes airlines will continue to seek those MROs that provide the best value.

"Protectionism, while a popular and perhaps an effective concept during a political campaign, is less likely to materialise in the MRO sector to the extent it may in other industries. Imposing tariffs will require the US Congress to approve tariffs. That prospect is unlikely when both houses of congress is controlled by a party that favours free trade."

Montreuil says the ban against new foreign FAA repair stations under the Obama administration was a greater impediment to international trade and competition in the MRO market than we are likely to see in a Republican controlled congress. "The motivation behind it was a key congressman heavily influenced by organised labour. The congressman is no longer in power and organised labour has less sway than it did in the past."

Congressional and GAO reports have found that the outsourcing aircraft maintenance services does not adversely impact safety as labour union sponsored studies have suggested, Montreuil highlights. Further, in a report to Congress the Congressional Research Service (CRS) found that there is a positive balance of trade among U.S. and foreign MROs. The CRS report concluded that the U.S. has not experienced job losses due to foreign MRO providers.

"The MRO market then seems a low priority target for the Trump administration to make good on protectionist campaign promises," says Montreuil.

Obviously, it's far too early to do anything other than discuss the potential of any new regulatory and jurisdiction trends impacting MRO in America. If anything the new administration has been vague and the threats have been veiled thus far. Khoo from GA Telesis is confident

cally in its existing and new facilities, which can support narrow- and widebody work to U.S. airlines, "and we are ready to support more widebody work which we believe will be repatriated to the U.S., hopefully in the near-term future," says Kleiman.

PEMCO CEO Pastor Lopez' feels aviation will continue to connect people and efficiently deliver goods across the globe. The U.S. election has only just come to an end so he is adamant to see how any new regulation will impact the industry. "We only

expect positive outcome of any regulation that will level the playing field across the world," he comments.

Regarding regulatory trends, CTS Engines are closely monitoring the FAA's position on metal additive manufacturing for repairs. "This is a huge area of opportunity for us, and we think it should be a priority for the FAA," Neff reckons.

Also, Montreuil highlights that the re-authorisation of the FAA in July of this year called out for greater oversight of foreign repair agencies for: drug and alcohol testing, pre-employment background checks and risk based inspections of heavy maintenance providers.

According to a presentation from analysts at ICF International, the North American fleet will have limited growth over the next decade and the slowest growth globally

1.4% CAGR; +1,300 aircraft. Khoo presumes that this may not necessarily have a significant impact on MRO spend, although the slower growth will have some impact, especially with OEMs like Boeing announcing their entrance into the services sector. "Other factors like age and condition of fleet along with fleet deferrals will also be a major factor. Regardless, if oil prices stay low, older aircraft will continue to fly and may even impact the MRO spend in a positive way," states Khoo.



Brian Neff says CTS welcomes the ageing of the North American fleet



U.S. airlines will continue to seek those MROs that provide the best value.
Photo: Airbus



AAR is investing strategically in its existing and new facilities.
Photo: AAR

Mr Lopez acknowledges the forecasted growth is slower in the US than in some parts of the world but stresses that the U.S. has adequate capacity to serve this growth. "The challenge for the industry is to be disciplined about capacity matching demand. The U.S. should benefit from insourcing trends as the cost in other parts of the world moves closer to parity with the U.S."

Kleiman from AAR also agrees that the North American fleet will grow in the low single digits in the coming years, pointing out however that slow growth of a large installed base is still significant growth. "A counteracting element to consider is the price of fuel, which appears to be staying at levels that are very positive for our airline customers," says

Kleiman. Clearly lower fuel prices will continue to make it an attractive proposition to maintain older aircraft in operation for a longer period of time. "That brings not only more significant maintenance events, but also the opportunities for additional upgrades including interiors and in-flight entertainment.

"The net result is that we see steady growth in current American operator demand. We also see opportunities to capture widebody MRO work that's not currently conducted in



Larry Montreuil VP Asset Management and Business Development at Werner Aero

North America. AAR built a new facility with two widebody hangars in Rockford, Illinois to leverage these opportunities," Kleiman adds.

Larry Montreuil reports the North American MRO market in 2017 will likely remain flat at around 1%, as operators bring new fleets of Neos and Max aircraft online, reducing maintenance costs in the short term.

As a mature engine MRO, CTS welcomes the ageing of the North American fleet. "We don't, and we will never compete on the newer models," Neff stresses. "From our position, the mature segment of the MRO market is growing at much higher rates than one percent. We have some strong programmes expected to impact 2017, so it will be a very good year."

AAR are bullish on this market and anticipate continued growth in their MRO business segment in the New Year. "Our airline customers are financially healthy and that's good for our business," Kleiman tells.

PEMCO have grown their MRO business about 21% CAGR in the last two years as they continue to drive Lean operations and strive for operational excellence. "Our on-time performance is over 93% for 2016 even after doubling the number of aircraft serviced from the previous year. Just recently, we were awarded a three-year contract through the end of 2019, plus two one-year options. Currently, our hangars are fully booked through the later part of 2017," Lopez mentions.

At GA Telesis, Khoo expects to see moderate growth for the MRO businesses in 2017 based on low oil expectations and higher utilisation of older aircraft. "With many airlines electing to defer new aircraft deliveries and thus extending life on their older fleets, we expect more positive results," Khoo projects.

Soaring above and beyond



STS at the MRO aftermarket conference in Shanghai.
Photo: STS

On-time delivery of certified aircraft and engine parts is what STS Component Solutions (STSCS) is all about!

Serving global aviation companies and MROs for nearly two decades, STSCS, a TRACE certified distributor, works with some of the largest passenger and freight airlines in the world by providing dedicated support to a growing network of global customers, and in today's fast-paced world of aviation, STS Component Solutions is the global company to locate, secure and deliver the critical components needed to keep flying.

STS Component Solutions joined the STS Aviation Group family back in 2008 and added another key element to the company's diverse service structure.

STS Aviation Group, which was founded in 1984, has quickly grown from humble beginnings to become a global powerhouse in the aerospace industry. Whether its aviation mechanics, engineers, line maintenance support or certified aircraft and engine components, STS dedicates itself to taking businesses from where they are now to where they need to be.

As a global solutions provider to the aviation industry, many of STS Component Solutions' capabilities cross over to both air-

line and MRO customers. Whether the organisation is supporting customers with OEM distribution material or catering a VMI (Vendor Managed Inventory) programme to their operation, STSCS' customised supply chain solutions have been embraced by its network of customers and provided a significant source of growth for the company. STSCS employs the most efficient and cost-effective methods for obtaining hard-to-find aircraft components, and continually expands its global inventory based on forecasted demands, historical usage and specific customer requirements.

With its rapid rate of international growth, STS Component Solutions has expanded by opening an office in Antalya, Turkey while also securing a warehouse in Shanghai (China) to support its growing customer base. The China warehouse has given STSCS the opportunity to provide additional cost and operational savings to its customer base within the Asia-Pacific region by reducing lead times and increasing service levels. Additionally, STSCS has invested heavily in data analytics, which continues to be an unparalleled resource to its customers. Whether the team is performing inventory assessments, forecasting optimised spares levels, or evaluating AOG history to determine the proper regional pools, the STSCS organisation is leading the industry by investing in technology and other valuable resources.

With the aviation landscape constantly changing, there is increased competition to update aircraft interiors through long-term modification programmes. Whether the airline decides to accomplish this work at a heavy maintenance facility or on an overnight check, STS Aviation Group is well positioned to support these demands while providing financial and operational savings to its customers. For example, STSCS has recently partnered with an airline to provide inventory management and a kitting solution, which delivers the consolidated interior retrofit material to the MRO upon aircraft arrival. This JIT (Just in Time) inventory philosophy increases operational efficiency by reducing inventory cost to airlines and MROs.

While STS continues to lead the industry by providing value added services to its customers, the company is constantly focused on aligning itself directly with customer's needs. This has been a primary focus since the first day and will continue to be a main focus as the company grows. STSCS Group President Tom Covella states, "STS Component Solutions is constantly evolving, and no grass ever grows under our feet. In addition, we are constantly looking at new opportunities to provide tailored solutions to our global customer base."

Given all of this growth and expansion, the most important factor that makes STS Component Solutions successful is its people. The passion and commitment that the team brings to the market every day of the year is what truly separates them from



Tim Russo from STS speaking at the MRO aftermarket conference in Shanghai.
Photo: STS

their peers. It allows the organisation to march to its mantra and ensure that STSCS is providing cost-effective "solutions to keep you flying."



The STS facility in Palm City.
Photo: STS

In the hot seat.....

Thierry Tosi, VP and General Manager, Service Solutions, Rockwell Collins

AviTrader MRO: Last year Rockwell Collins introduced the Corporate Aircraft Service Programme (CASP), what does this entail?

Tosi: The standard CASP solution has been in existence for more than a decade. We have seen double digit growth in new CASP enrollments over the last 3-4 years, and expect this growth to accelerate for the near future. With the ageing aircraft flying longer and reaching a point in their lifecycle, maintenance becomes one of, if not the biggest cost of their overall budget. Our newest CASP offerings, CASP Essential and CASP Elite were created to address a broader set of customers in the business jet market while providing the same world class support CASP is known for by our customers.

AviTrader MRO: Supposedly, the new CASP offering compliments an already established CASP service, so what's new?

Tosi: CASP has long been recognised for two things: its simplistic contract structure and its ability to provide turnkey customer support to its customers at a predictable, fixed cost. Our CASP Essential offering is targeted at small aircraft, low flight hour operators who are looking for a cost effective, low risk maintenance solution. The minimum flight hour requirement is significantly lower making it an economical solution for the leisure operator. CASP Elite on the other hand, is a one-stop-shop service solution for large business jets and international operators. CASP Elite brings together not only maintenance support, but subscription services for things like the FMS database, leverages our most recent ARINC acquisition by offering discounts on international trip planning services and provides free-of-charge international shipping for AOGs. CASP Elite also offers something that separates itself from other maintenance solutions - discounts on new Rockwell Collins equipment and service bulletins for customers looking to perform upgrades to their aircraft. With the ADS-B mandate on the horizon, we have already seen a lot of interest in our CASP Elite offering.

AviTrader MRO: Since you announced this programme exactly a year ago, what has been the market response?

Tosi: Both the CASP Elite and CASP Essential offerings have exceeded our initial business

plan projections globally. The first year we were hoping for a 10% adoption rate and we were able to reach 15% which tell us the market likes what they are seeing. Now we are focusing on which regions of the world and which aircraft types are seeing the most value out of the new service offerings. We will then align our focus there.

AviTrader MRO: Do you see the possibility of amending CASP to suit the commercial aviation sector too?

Tosi: We see a lot of potential for CASP in the future. One of the key tenets at Rockwell Collins is our ability to leverage our technology in both markets we serve: commercial and government/military. For example, the ProLine display flying in a business jet is the same display being used in the simulator pilots train on, and is the same display flying in some military fixed wing and rotary wing platforms. We are exploring opportunities to leverage our investments and global infrastructure to meet the needs of other market segments facing some of the same constraints: unpredictable maintenance costs, lack of capital to invest in spares, and the need for guaranteed operational availability of their aircraft. For the air transport market, in particular, there are some niche areas where CASP is actually used today, but we have seen much more success with our Dispatch100 asset management programmes.

AviTrader MRO: In your experience, what are the most common maintenance requests from business aviation operators?

Tosi: Business jet operators are a diverse group, but there are three common requirements we hear most often from our customers: cost, performance, and ease of doing business. For example, they want to have a budget they can manage without the unexpected peaks that come from an unexpected failure. Also, the ability to guarantee performance is key, as well as the ease of doing business. If there is one word that is most associated with CASP by our customers, it's the word simple. CASP is simple. Our terms and conditions are straightforward, the coverage offers total support for our equipment.

AviTrader MRO: In terms of business aviation support, what's next in the pipeline at Rockwell Collins?



Thierry Tosi from Rockwell Collins

Tosi: There is actually a lot going on in the business aviation market. Probably the most talked about thing is the ADS-B mandate. The good news for our customers is Rockwell Collins has parts to support any demand. Our aftermarket team has been working very closely with our dealers and customers to ensure they have an affordable solution that meets the mandate requirements. Rockwell Collins also has several ProLine Fusion platforms entering into service as well as numerous aircraft upgrades, all of which can be supported by CASP. Lastly, we continue to enhance our cabin and connectivity offerings, allowing customers to stay entertained and informed during flight. CASP covers more than just our avionics, it also covers all our cabin equipment and some mechanical equipment like throttle quadrants or actuators. Bottom line, with ~85% of business jets today flying with Rockwell Collins equipment, CASP should be the preferred maintenance solution for customers.



The apprentice - you're hired!

Graduated Monarch aircraft engineers with Chris Dare, MD (left) and Jeff Brewer, training manager (right).

Monarch Aircraft Engineering Limited (MAEL), the engineering division of Monarch has produced over 750 engineers through its the hugely successful apprenticeship scheme which is now in its 45th year.

In August, AviTrader announced the graduation of MAEL's aircraft engineering apprentices at the Monarch Aircraft Engineering's Training Academy in Luton. Those 11 successful aircraft engineering apprentices completed a City and Guilds Level 3 Advanced Apprenticeship in Aeronautical Engineering.

Chris Dare, managing director at MAEL gave AviTrader MRO an update on their progress. "The apprentice graduates are progressing and performing well, they are demonstrating the skills they gained through the apprenticeship and are valuable members of the workforce. Our fourth year apprentices are currently completing their City and Guilds Level 3 and EASA Part 66 'A' licence and we expect them to graduate in August 2017. In September we took on 14 new apprentices but next year we plan to double the intake."

The qualifications attained concentrate heavily on the students gaining excellent hand skills and a rounded understanding of the whole of the aircraft maintenance field. From the initial training, the apprentices then relocate to one of MAEL's maintenance bases where they complete the various elements that make up the City and Guilds Level 3 Aeronautical Engineering Advanced Apprenticeship (On-Aircraft Maintenance - Category A). The apprentices then receive on site practical training working alongside highly skilled mentors, who pass on essential knowledge and experience.

When asked if MAEL trained applicants for other airlines Dare confirms the graduates were all offered permanent positions with MAEL as part of the company's strategy to increase the engineering head count. "With a shortage of skilled aircraft engineers in the industry our apprenticeship scheme is a great source of home-grown high calibre aircraft engineers. So far our scheme has provided over 750 engineers into the industry."

MAEL's apprentice scheme provides an essential pipeline of skilled engineers but the global MRO industry still faces a short supply of freshly skilled talent. Relating to the industry in general, Mr Dare feels the initial drawback starts with the recruitment process. "It is difficult to attract people into an engineering career and there is a shortage of apprentice applicants with the basic skills and knowledge."

He emphasises that to recruit apprentices there needs to be strong support with on the job training by qualified engineers who become mentors. "The impact for companies is with the time this can take out of the mentor's day. A fine balance is required to get the knowledge transfer without affecting production. For example we have a total of 46 apprentices currently training, with 29 in Birmingham and 17 in Luton. There are no short cuts to becoming an aircraft engineer and it requires commitment from the company and the individual," Dare stipulates.

With the success of the apprenticeship Monarch has also developed a direct entry scheme to enable engineers with transferable skills to be retrained in another engineering discipline. "Our direct entry scheme works well, there are good engineers with transferable skills that can be developed to the aircraft engineering sector," Dare reports.