Airbus’ and Etihad Airways Engineering’s joint A380 MRO Services offering commences operations in Abu Dhabi

Work is starting on the first A380 “six-year” C-check for a third-party customer airline at Airbus’ and Etihad Airways Engineering’s joint A380 MRO Services offering in Abu Dhabi. The aircraft, A380 MSN072 belonging to Lufthansa, arrived at the end of October, and following an initial inspection phase, is getting ready to undergo the heavy check at Etihad’s state-of-the-art heavy maintenance facility. The extensive work scope, which includes major structural checks and incorporation of the mandatory Service Bulletins, is supported by an onsite Airbus technical advisory team.

First agreed last year, this joint services collaboration materializes Etihad Airways Engineering’s recently announced membership of the international “Airbus MRO Alliance”, while for airlines it establishes OEM-backed third-party A380 maintenance, engineering and embodiment capabilities in Abu Dhabi, delivering efficient turnkey solutions under one roof. During the actual heavy maintenance visit, Airbus Customer Services provides technical advisory, logistical support and planning optimisation managed by a dedicated
on-site expert team, allowing minimised downtime of the aircraft.

**Latest A321neo build standard with “Airbus Cabin-Flex”, 97t MTOW option and long-range capability nears rollout**

Final assembly of the first A321neo, which combines “Airbus Cabin Flex” (ACF) with a new 97 metric tonne MTOW (Maximum Take Off Weight) capability and an option for additional fuel capacity, is underway at Airbus’ facilities in Hamburg. This variant introduces new door and fuselage enhancements, which when coupled with the new higher take-off weight, allows airlines to either increase maximum capacity to 240 passengers for their intra-regional high-density missions, or allows installation of an additional (third) underfloor fuel tank for up to 4,000nm intercontinental range with around 206 passengers.

The most visible changes compared with the previous A321 variant are the ACF-related enhancements. These include: the removal of the door just ahead of the wing (known as “Door-2”); the addition of new upward-swinging double emergency over-wing exit doors (ie four in total); and the moving further back by four frames of the door just aft of the wing (known as “Door-3” on previous A321s). One pair of the over-wing doors and the relocated “Door-3” (now further aft of the wing) can be activated or de-activated depending on the respective layout and seating density. Moreover, the deletion of Door-2 facilitates for the first time an uninterrupted seating zone spanning the entire forward half of the aircraft, thus enabling variable business class sizes without degrading layout efficiency.

In addition to these cabin features on the main deck, the A321 “ACF” model also brings more flexibility in the ‘underfloor’ cargo area where a third “Auxiliary Centre Tank” (ACT) can now be installed. Previously, the A321 offered the provision for up to two ACTs the size of a cargo container. Combined with the increased MTOW of 97 metric tonnes, the third ACT adds a further 400 nautical miles of range making this variant of the A321neo the longest range single-aisle airliner in production known as the A321LR. Airlines will thus be able to make long-haul flights up to 4,000 nautical miles with 206 passengers. The A321neo ACF is an option for now, but will become the default build standard for all A321neos from 2020. Following final assembly, the aircraft will make its first flight in the coming months, with first delivery expected for Q2 2018. As for the A321LR, the first delivery is scheduled for Q4 2018.
First BelugaXL takes shape in Toulouse

Work on assembling the first BelugaXL large transporter is progressing well, and attachment of its main cargo door is set to commence in mid-November. Recently received parts for the aircraft's specially designed tail section which have been installed on the aircraft include the horizontal tailplane (HTP), the tail cone and the vertical tailplane (VTP). Airbus has also launched the electrical and mechanical systems installation for the whole fuselage, in readiness for electrical power-on at the end of the year and subsequent ground tests early in 2018. Integration work will start soon on the second aircraft.

The first BelugaXL is scheduled to fly in Q3 2018, ahead of a 10-month flight test certification campaign and will enter service with Airbus Transport International (ATI) in 2019. Aircraft ‘number one’ is the only aircraft which will take part in this campaign and so it is being equipped with a ‘full’ flight-test instrumentation (FTI).

The project was launched in November 2014 to address Airbus’ future ramp-up capacity requirements. Derived from the freighter version of Airbus’ A330-200, the BelugaXL is six metres longer, one metre wider and has a payload lifting capacity six tonnes greater than the current Beluga A300-600ST. When operational, the fleet of five BelugaXLs will take over transporting complete sections of Airbus aircraft among the company’s production sites around Europe and to final assembly lines in France, Germany and Spain.

Certification of A320neo SHort AiRfield Package (SHARP) by Brazil’s aviation authority – ANAC – paves way for service entry

The recent certification received from the Brazilian National Civil Aviation Agency (ANAC) for Airbus’ SHort AiRfield Package (SHARP), paves the way for the start of operations with Avianca Brasil and Azul Airlines in the very near future. SHARP is a unique combination of aerodynamic, flight control, braking and software modifications improving both the take-off and landing capabilities of A320neos operating in complex airports. SHARP will bring new efficiencies to
Brazilian airlines operating in Rio de Janeiro’s Santos Dumont Airport (SDU), allowing them to maximize their capacity and profitability. ANAC’s certification award joins other leading aviation authorities which certified SHARP – namely the European Aviation Safety Agency (EASA) and the Federal Aviation Administration (FAA) – in July 2017. Azul, followed shortly thereafter by Avianca Brasil, selected SHARP for their growing A320neo fleets and are the first two customers worldwide to opt for the solution package.

SHARP is a result of a close collaboration between Airbus, its customers and engine manufacturers (CFM and Pratt & Whitney) to enhance payload capabilities for airlines which operate in complex airports while also bringing a sustainable and competitive advantage for their A320neo fleets. The key components of the package are a Kevlar composite panel modification to the wing’s ‘Root Fillet Fairing’ to enable the improved landing performance and vortex generators attached to the vertical tail plane improving take-off performance.

Mobile USA FAL receives its 50th A320 Family shipset

Airbus’ US final assembly line (FAL) in Mobile, Alabama, recently received its 50th shipset of A320 Family subassemblies. These components will become the 50th Airbus aircraft produced in the US – an A321 for Delta Air Lines to be delivered in December. The Mobile FAL received the component for its first aircraft in June 2015. At the time of writing, in November, the facility had delivered 43 aircraft to four customers and had reached a production rate of four per month. In other recent news, in October, AirAsia took delivery of the first A320neo to be assembled at the Airbus Final Assembly Line Asia (FALA) in Tianjin, China. Today Airbus has A320 Family FALs located in four countries: Toulouse in France; Hamburg in Germany; Tianjin in China; and Mobile in the US.

A350 goes digital for parts traceability

The A350 programme has become the first to introduce digital Auto-ID / RFID* part marking for flyable components in production. Auto-ID part-marking will soon supersede traditional paper-
based traceability means in all A350 plants and the final assembly line (FAL). Going forward, as parts are fitted to an aircraft, installation will be confirmed with an electronic scanner. Accurate aircraft parts traceability is necessary for assuring Airbus product quality and regulatory compliance, which has historically been managed manually using thousands of parts ID slips – one for each part fitted. The introduction of digital Auto-ID for flyables ensures better quality data and represents significant cost savings thanks to accelerated traceability tasks and total paper trail elimination on a large scale. Airbus’ other aircraft programmes will adopt the new approach in due course, with traceability automation becoming a reality for the A380 before year end, followed by the A320 and A330 in 2018.

* RFID = “Radio Frequency ID”

New competency-based pilot training now available for customers

A new ‘Type Rating’ pilot training course prioritising pilot competence acquisition is now available for the A320 and A330 programmes following its approval by the EASA ahead of schedule. This competency-based training approach, which had been previously introduced on the A350, incorporates all Airbus’ latest manufacturer recommendations. It focuses on the following principles: development and assessment of fundamental pilots’ competencies (competency-based teaching, grading & assessment); reinforcement of basic flying skills through new training modules; explanation of the underlying behaviours required for successful execution (instead of focusing on the outcome of events or exercises); and increased practice time, with the manual handling of the Full Flight Simulator (FFS) being introduced earlier.

Included are the new ‘Intermediate’ optional modules, available for the A320 and A330. These allow for an adapted curriculum with the opportunity to refresh or reinforce the fundamental skills and competencies expected for a pilot: Instrument Rating reinforcement; Multi-Engine exposure; Jet orientation course; and Multi-Crew Cockpit cooperation. Meanwhile, the Type Rating modules (eg. the ‘Advanced’ modules) provide the student with a smooth transition from basic flight environment to a complex flight environment.

Sichuan Airlines signs A350 XWB Flight Hour Services (FHS) components support and AiRTHM agreement with Airbus

Sichuan Airlines, an all-Airbus-fleet airline based in Chengdu, has selected Airbus Flight Hour Services (FHS) and Airbus Real Time Health Monitoring Service (AiRTHM) to provide components and predictive maintenance support securing the highest service level and operations for its new fleet of four A350 XWBs. Sichuan Airlines is to operate the A350 XWBs in the coming months on its international routes including Chengdu to the US. This long-term FHS-Components and AiRTHM agreement provides an extensive scope of A350 line replaceable units (LRUs) and APU, guaranteed spare parts availability through pool access service and on-site stock at the customer’s main base, as well as component reliability management and maintenance. In addition, AiRTHM brings a proactive maintenance mode to A350 operations. With this latest agreement, Airbus FHS has now been selected to cover more than 400 aircraft, ranging from the A320, A330, A380 to the A350 XWB.

ST Aerospace and Airbus strengthen collaboration with airframe MRO agreements

ST Aerospace (STA) and Airbus have entered into General Terms Agreements (GTAs) for the provision of airframe heavy maintenance and modification services by STA to Airbus and its customers. With these GTAs, which have an effective period for three years, Airbus will benefit from greater access to STA’s strong Maintenance, Repair and Overhaul (MRO) capabilities at four
of its facilities specialising in airframe maintenance across the Asia and North America region to support in-service requirements of its customers’ fleets. STA has a long history and wide experience in servicing Airbus aircraft, which will be valuable in meeting Airbus’ need for a strong partner with a global network to support the rapidly growing Airbus fleet around the world.

**China Airlines becomes an Airbus approved supplier for MRO services and aircraft conversion services**

Following an in-depth Airbus evaluation process earlier this year, China Airlines (Taiwan) has been approved and qualified as a supplier for MRO services and aircraft conversion services. The centre will be based in Taipei. This qualification, which will help China Airlines to develop its MRO centre for heavy maintenance capabilities and modification embodiment, follows the launch of a joint development project with Airbus on the Internet of things (IOT) applied to MRO services. China Airlines also recently became part of Airbus’ MRO Alliance – which was announced in June at the Paris Air Show.