Entering the A350 age

Posted on 02/03/2015 - 10:03

As the long-awaited A350 enters into service, *Andrew Medland* argues that Airbus' new widebody will face an uphill battle to be embraced by the MRO industry as a potential platform for future growth.

They are the beginning of a new era in flight; however, predominantly composite aircraft, such as the A350 and the 787, are yet to be considered as an attractive investment for MROs.

The world entered the A350 age at the beginning of 2015 — after a long wait — when Qatar Airways inducted the first A350-900 aircraft into its fleet. Similar to its rival, Boeing's 787, the A350 brings a slew of new technologies to market. Airbus used new composites, as well as titanium and aluminium-alloys, extensively throughout the fuselage. Solid-state power control, variable-frequency generators, high-pressure hydraulics and integrated modular avionics mark a step change for systems within the aircraft as well.

With another 779 A350 aircraft on order, and 843 additional 787s projected to join the current fleet of 228, there is a growing base of customers who will need aftermarket support for the full range of their newly acquired technologies.

Airbus and Boeing invested heavily in research and development to push forward with these new widebody entries, however, they then retreated to entrenched technologies when they launched the next generation of narrowbody aircraft. Airbus' A320neo and Boeing's 737NG and 777X have aluminium fuselage designs. These are the cornerstone aircrafts for many fleets, so the decision to proceed with aluminium fuselages casts the next 30 years as a period of continuous incremental change within our industry; not the dawn of the new age heralded by the A350 and 787.

Innovation always faces the daunting task of overpowering the stability of existing technological paradigms. Rather than becoming the forbearers of a new archetype, the A350 and 787 stand a greater chance of harbouring multiple discontinuous technologies. While the OEMs have plucked bits of the new technology for other models, the rest of the market is evolving away from some of the core features of these aircraft, and that will limit the size of aftermarket opportunities for the A350 and 787.

Even though the A350 is at a nascent age in its lifespan, MRO leaders will need to think carefully about whether they can profitably compete for service contracts for the fleet. First, there is the limited overall size of the market for these aircraft. Second, the aircraft are used by a relatively small number of carriers. Third, there are high capital costs associated with retooling a shop to gain the capabilities necessary to service these radically different airframes, components and engines.

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Further compounding the decision to participate in the A350 aftermarket is the availability of licence agreements that grant authorisation to repair significant portions of these aircraft. OEMs continue to restrict the award of licences and have already anointed a chosen few to handle the A350 aftermarket. Very few additional players will win the right to compete for A350 business.

The end result will be a very limited pool of two to three competitors who can realistically make the jump into the A350 aftermarket and do so at a scale that will enable a profitable business. These shops will stock up capabilities necessary to maintain active A350s. However, the barriers to entry will block many others from even attempting to contend for business.

Carriers could lose out from such an aftermarket structure. With few competitive options in any region, airlines will have difficulty running competitive processes and bidding work out to the market. Instead, A350 and 787 fleets are poised to become price takers within the MRO industry.

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