RARA

EmpowerMX

In the hot seat

Turboprops
Delivering
the goods

Low-Fare & Regional Airlines
Vol 40 No 5 October/November 2023
www.laranews.net

MRO Special

Scoot's CEO Leslie Thng

Pushing the boundaries

Solving the future

Lucy Powell surveys recent trends in the cabin MRO market and finds out how companies are responding to airline operators' upgrade and refurbishment demands.



"Low-fare carrier and regional operators are also showing interest in material changes that offer both aesthetic appeal and durability."

Sohaib Ahmed, Programme Manager Interiors, AJW Technique Interiors he aircraft cabin modification market is growing exponentially, as airlines reconsider the upgrade and refurbishment projects they had previously shelved during the pandemic.

Passenger demand is currently a key driver in the cabin MRO sector, coupled with operators increasingly moving to right-size their fleets with newer generation aircraft and meet higher levels of safety standards.

At the economy end of the scale in low-fare carriers, seat densification in cabins has gone on the rise to address the increase in traffic.

Meanwhile, in the premium economy (PEY) cabins, innovations in seating and IFE technology are also having an impact on operators, with a number of low-fare airlines including the likes of flydubai upgrading their cabins from one class to two, in a bid to improve the passenger experience.

Offering full turnkey solutions to support operators' cabin upgrades and reconfiguration on a range of aircraft platforms, AAR's Engineering Services has noticed this growing demand as airlines extend the lives of their aircraft.

"We don't see this demand slowing down any time soon," says James Leech, Business and Proposal Development Engineering Services at AAR.

"Many operators are looking to carry more passengers as well as bringing more aircraft online quickly.

"As operators evaluate keeping their aircraft in service longer, we expect the refresh and refurbishment of existing galleys, lavs and monuments to continue to increase."

Similarly, Sohaib Ahmed, Programme Manager Interiors at AJW Technique Interiors, a brand of AJW Group, has noticed a growing emphasis on improving passenger experience as a reason for cabin refurbishment.

The company's services include galley refurbishments, seat cover changes and replacements, as well as lavatory replacements and cabin customisation, and it has worked with both regional and lowfare operators.

Ahmed says: "Even within the constraints of low-fare carrier and regional operators, carriers are investing in seat comfort enhancements, including ergonomic designs and improved cushioning. They are also showing interest in material changes that offer both aesthetic appeal and durability."

CABIN OPTIMISATION

With a global, growing MRO portfolio and two interior modification facilities in Canada and Ireland, as operators enter the winter period, STS Aviation Services has likewise seen increasing work for refurbishment.

"[There are] a number of low-fare carriers coming into our hangar facilities and several cabin refreshes required during maintenance," Lena Watters, Senior Vice President and General Manager of STS Aviation Services in Canada confirms.

Diehl, which designs and manufactures a range of cabin solutions including lavatories, galleys and lighting, as well as offering upgrade and refurbishment cabin solutions, is no stranger to this shift.

Joerg Rissiek, SVP Sales, Marketing and Business Development at Diehl, says: "[Cabin upgrades] are certainly a strong current growth market for us. What we're seeing now is a focus on cabin





Diehl's AirPax module comprises one galley and two lavatories and weighs 60 kg less than standard solutions. Photo: Diehl Aviation

optimisation, so our customers are asking what we can do to help."

Rissiek notes that the company has seen plenty of opportunities to lend its services in the regional market in recent months, and is surveying options with some well known airframe manufacturers.

However, when it comes to cabin upgrades, it's not always about cost-cutting.

"Surprisingly [we're seeing that] the best cost solutions are not always the main priority for operators, even in the low-fare carrier markets," says Rissiek.

"We are also seeing it with regional aircraft too. Airlines aren't only looking at quarterly results. They're looking more into the future and responding to customer requirements, passenger requirements. They want to have safe and sustainable flights."

PARTITIONS PLEASE

One key target of cabin upgrades are aircraft galleys, spurred by operators' desires to boost operational efficiency, passenger satisfaction and branding.

Ahmed says: "Operators are actively pursuing galley refurbishment solutions that

optimise space and streamline workflow efficiency. This is particularly important to carriers who operate short-haul flights, as time is of the essence."

Weight is also a factor that cabin MRO providers are having to consider more and more - particularly for low-fare and regional operators. Which in turn means material selection is becoming more of a focus.

"Lightweight yet durable materials are becoming a hallmark of galley refurbishments as there is a drive to minimise aircraft weight to enhance fuel efficiency and cost-effectiveness," says Ahmed.

Leech says AAR has also seen this, but notes the variation in what operators are asking for.

"We've had customers looking to modify their current galley layouts in an effort to better support their current level of passenger operations," he says.

"[But] some are opting for a removal of galleys to accommodate more passengers, whilst others are looking to replace old galley inserts and replace it with newer technology at the same time the aircraft is reintroduced into service."

"Airlines aren't only looking at quarterly results. They're looking more into the future and responding to customer requirements, passenger requirements. They want to have safe and sustainable flights."

Joerg Rissiek, SVP Sales, Marketing and **Business Development, Diehl Avation**

TAKE YOUR SEATS

Upgrades and refurbishment of seating is also another crucial aspect of cabin modification, with operators looking to optimise space in their upgrades, which often involves reconfiguring seats and improving materials.

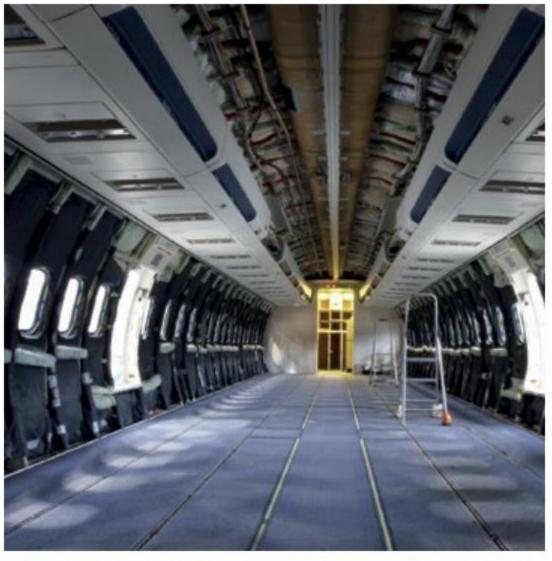
Leech confirms that AAR Engineering Services recently received FAA Supplemental Type Certificates (STCs) to upgrade passenger seating for a US low-fare carrier's A320 fleet.

The company also carried out several one class to two class cabin reconfigurations, as well as a high-density seating upgrade for regional and low-fare carriers in the Asia-Pacific region involving A320ceo and neo aircraft. Both resulted in the issuance of EASA STCs.

"This is all driving the need for integrators [like AAR] to offer quick turn capabilities to supply seats and monuments, and integrations, allowing operators to place aircraft quickly into revenue service," he says.

STS Aviation Services' Watters also identifies in-flight entertainment as a sought-after request.

"The most popular modification requests include passenger seating and in-flight



Letting in daylight: the need to source lightweight interiors is continuing to drive airline operators' decisions in helping to reduce carbon emissions. Photo: STS Aviation Services



"What was once readily available in the market may now take eight to 12 months or longer."

James Leech, Business and Proposal Development Engineering Services, AAR

entertainment packages. These tend to be upgraded more [than galley areas] due to the impact these items have on the passenger experience."

However, space above the seats should not be forgotten. One major project Diehl is working on relates to the A220 XL bins, which are offered as line-fit for Air Canada and are due to be offered as an upgrade option for all A220 operating carriers.

"This is a very strong trend in the upgrade solutions market," says Rissiek, noting how for low-fare and regional carriers this bin upgrade can offer improved revenue potential.

"It's in high demand, and they're a key product for us in the future."

Diehl also recently unveiled a collaboration with HAECO Cabin Solutions, which reimagined the single aisle premium cabin with a five abreast layout, designed to maximise passenger load, comfort, and improve airline yields.

"We're seeing longer haul flights in single

aisle aircraft, so single-aisle innovation is an area we're currently looking into," says Rissiek.

Accessibility is also something operators have started to take note of more within cabin upgrade and refurbishment services. Although it would be remiss to call the accessibility of passengers and their needs a so-called "trend".

Rissiek says: "We're responding and preparing for an ageing population to make them comfortable and safe on an aircraft. We also want to be a company that actively considers how all persons of reduced mobility (PRM) can bring new challenges [to operators]."

Diehl's AirPax module has already garnered interest from low-fare operators, likely in anticipation of potential regulations. Weighing 60 kg less than standard solutions, it is composed of one galley and two lavatories forming into a single unit that enhances space and is entirely wheelchair-accessible.

Airlines operating Airbus aircraft can also have their cabins retrofitted with touchless lavatory features, another innovative feature that Rissiek says is proving increasingly popular.

STRIKING A BALANCE

However, despite this surge in cabin upgrade and refurbishments, MRO work has not been entirely plain sailing. Challenges for cabin MRO service providers in the last year have all converged around one main sticking point – the supply chain.

Leech says AAR is seeing price increases for some commodities in the cabin of 300% to 400%, alongside extended turnaround times.

"What was once readily available in the market may now take eight to 12 months or longer," he says, a timeframe which severely limits the support companies like AAR can put to turning aircraft around back into the hands of the operator.

"[We're also] seeing very long lead times on certain materials including wiring and composite panels," he adds.

STS Aviation Services' Watters concurs, noting that passenger expectation has made this delay even tougher on MRO cabin interior companies as they work to find solutions.

"Many components are custom to a particular airline. This includes fabrics, plastics, carpets. And at the same time, passenger expectations are continuing to increase are they want improved amenities, services, and equipment available to them."

Adapting strategies to deal with this supply chain challenge have been crucial, whether that's diversifying sourcing or dealing with alternative scheduling to help limit the impact, AJW Technique Interiors' Ahmed notes.

"Communication and collaboration are two very important factors - essential for efficient and cost-effective cabin MRO operations," he says.

However, Ahmed indicates that communication is also key to answer the challenges that come with working alongside operators to deliver a premium upgrade product - striking the right balance between design and safety.

"Our teams possess an intricate understanding of these regulations, continuously updating their knowledge to ensure all customisations meet safety and compliance mandates," he says.

"We involve regulatory experts from the project's inception, embedding regulatory considerations into the design and planning phases. Constant communication with operators is the key."

Rissiek identifies a different challenge that originates from pent up passenger demand and subsequent requests from lowfare and regional operators.

"You must combine and balance different dimensions [of cabin upgrades] effectively," he says.

"On the one hand, you've got customer centricity - you want to respond to everything a low-fare or regional carrier



Diehl Aviation recently collaborated with HAECO Cabin Solutions on this five abreast layout. Photo: Diehl Aviation

might want. Then there's efficiency, sustainability, and innovation.

"All of this then needs to be combined with cost efficiency. It's very interesting, and a quite a challenge, but in a positive way because you can discuss with operators how they want this to be balanced."

ECO-EFFICIENCY

High up on operators', manufacturers' and MRO providers' lists is also, of course, sustainability.

Affecting all aspects of cabin upgrades, from seating, lighting, and galleys, operators are demanding eco-efficiency.

STS Aviation's Watters discloses how a need for lightweight interiors is continuing to drive many airline operators' decisions in helping to reduce emissions.

The type of material used is also integrating itself into cabin refurbishment decisions, with Watters noting how "e-leather and recyclable plastics are increasingly common".

In a similar vein, AJW Technique Interiors champions eco-friendly solutions through the products used in its upgrades.

One key product to hit the market this year has been its SkyLeather material, unveiled at AIX Hamburg in June.

Some 25% lighter than the latest version of hide leather, it offers operators a costeffective, high-quality alternative and serves as an attractive option for enhancing overall aircraft performance.

"It has been well received by the market and we're optimistic about further growth going forward," says Ahmed.

Use of SkyLeather for interior refurbishments for an A320 or Boeing 737-800 operator could, according to Ahmed, save 16,000 kg (35,000 lb) of fuel and reduce their carbon footprint by 50,000 kgs per year, per aircraft - ideal for lowering weight and fuel consumption.

Galley revamps are also "showing a keen interest in eco-friendly materials, wastereduction solutions and energy-efficient equipment," Ahmed adds.

However, as Diehl's Rissiek rightly points out, there's no "one solution for all" when it comes to cabin upgrades and refurbishment.

Yet whether its seat densification, seat and galley modifications, or premium cabin upgrades, in short, it's now all about optimisation on narrowbody and regional aircraft, with operators upgrading and refurbishing cabins in a way that is comfortable, accessible and sustainable.



AJW Group is the world-leading, independent, parts, repair, lease, engine, flight hour programme and supply chain solution integrator, transforming efficiency in commercial, business and defence aviation.

With hubs and offices on every continent - including AJW Technique, a state-of-the-art component MRO facility in Montreal - nose to tail, we have you covered.