



Bombardier's CRJ aircraft make up a sizeable portion of the US regional market. Image: MHIRJ

Pushing the envelope

Set against aircraft manufacturer backlogs, the component overhaul market is both bustling and stretched to capacity as older aircraft are kept flying for longer. But how are MROs coping across the globe?

Reflecting on the current market, Ross Mitchell, Senior Vice President of Strategy, Business Development and Communications at MHIRJ Aviation Group (MHIRJ), sees the component overhaul market for the CRJ series as a “fairly strong” one.

Headquartered in Montreal, Canada, MHIRJ provides operational, engineering and customer support for CRJ aircraft across the globe.

CRJs make up a sizeable portion of the US

regional market, and although they are no longer in active production, component overhaul and repair to keep the CRJ fleet flying is now more important than ever.

Mitchell tells *LARA*: “The demand for CRJs in regional flying, especially in the US, is leading operators to send more component repair and overhaul (CR&O) work to MHIRJ. The CR&O is really about keeping the CRJ fleet flying and using the fewer new resources to meet the demand of the flying public.”

HIGH DEMAND

In a busy CR&O market, MHIRJ's main challenge is managing high customer demand and ensuring parts availability when dealing with repairs. High demand, however, leads to supply issues – necessitating MHIRJ to deploy specialised machining and capabilities to support the repairs.

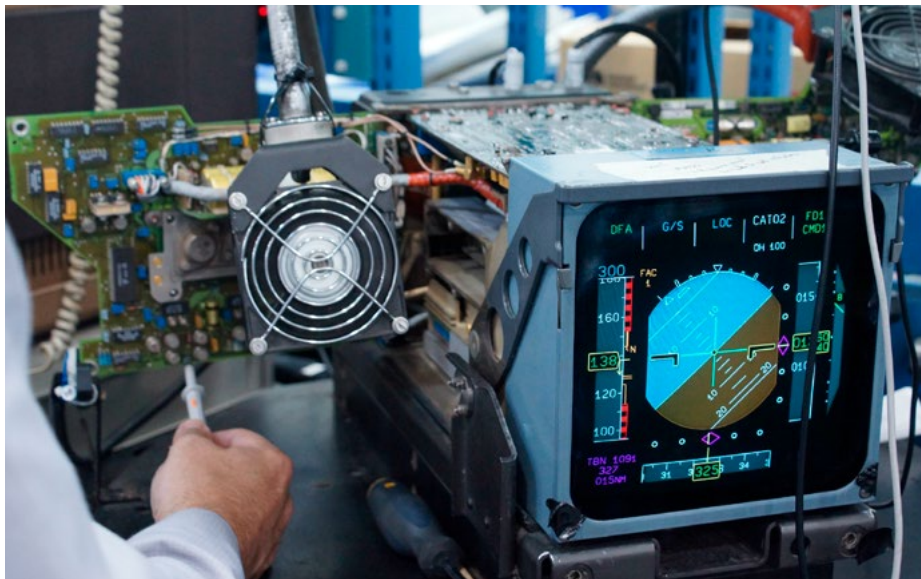
Mitchell notes that reduced deliveries to mainline operators in the US has resulted in an increased use of CRJs – with the reduction of aircraft retirements putting pressure on resources in both the supply chain and workforce.

Asked about its efforts to align its CR&O operations to its wider sustainability strategy, Mitchell adds: “By extending the useful life of these aircraft, we are mitigating the potential environmental impacts associated with introducing new aircraft that do not offer significant fuel efficiency benefits.”

AJW Technique, a leading MRO facility and the global hub for AJW Group's component repairs, concurs with the demand for component overhaul expressed by MHIRJ.

Supporting a variety of different





Supply chain difficulties have led to extended lead times and delays in spare parts deliveries across the industry.
Image: AJW Technique

aircraft from Bombardier (CRJ/Challenger/Learjet/Global series) and Embraer (E170/E190), the company has a broad regional aircraft portfolio.

Looking at the current market, Louis Mallette, President of AJW Technique, says: “We’re seeing a continued high level of demand across our component MRO portfolio. Delays in aircraft deliveries and in-service issues causing the grounding of new-generation aircraft has reduced availability on narrowbody fleets – including the A220, A320 and Boeing 737.”

As a result, AJW Technique is seeing an increased and extended use of narrowbody and regional aircraft, as aircraft are

“remaining in service longer than anticipated,” adds Mallette.

“This, coupled with high overall market demand is resulting in a continued demand for component repair to enable these older aircraft to remain in operation beyond their expected predicted retirement.”

Like MHIRJ, combatting the supply chain continues to be AJW Technique’s “major challenge” – with extended lead times and delays in spare parts deliveries increasing turnaround times (TATs) for its component repairs.

To mitigate this, the company has been using used serviceable material (USM) where available, although Mallette admits

there is a slowdown on this too, affected by the reduction in the number of aircraft retirements.

He says that confronting this challenge is done at a group level, adding: “AJW is tackling this challenge with a comprehensive strategy that addresses both pressing needs and long-term sustainability objectives.

“We are enhancing our resilience through strategic investments, improving collaboration with stakeholders, and advancing sustainable practices alongside efficient logistics partners. These efforts aim to create a more robust operational framework, while also contributing to a greener aviation industry.”

On the topic of a greener aviation industry, sustainability in AJW Technique’s component repair operations is not to be neglected.

For the MRO, its component repair services “form a key element” of its sustainability strategy.

Mallette says that its procurement teams prioritise sourcing sustainable materials and reducing the environmental impact of its repair processes.



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Louis Mallette, President, AJW Technique



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Ross Mitchell, Senior Vice President of Strategy, Business Development and Communications, MHIRJ

SUPPORTING GROWTH

As a third-party MRO, AMETEK MRO has a slightly different perspective on the component overhaul market.

The company’s VP of Sales EU, Ismael Fadili, says that the market is in “good shape, with expected growth predicted to be above three per cent”.

With a wide range of component repair services across commercial aircraft, including regional jets from Embraer and smaller Fokker aircraft, AMETEK MRO’s core areas are actuation, aviation safety, avionics, landing gear systems, power and thermal management systems.

Given the increased aircraft utilisation, Fadili says the company is therefore seeing increased landing gear, wheels, brakes, and safety equipment overhaul at its facilities.

He admits that the industry is “still facing challenges with supply chain disruption and lack of resources” but is “confident [AMETEK] can address these challenges and support the expected growth.”

For sustainability, Fadili says a crucial part lies in the company’s capacity to extend its regional capabilities to airlines,

MROs and brokers.

He explains that this strategy “reduces [AMETEK MRO’s] carbon footprint through less transportation of components for repair”.

UP TO THE CHALLENGE

For MHIRJ, another main challenge across the business is focused on recruiting an active workforce.

One way the company has worked to overcome this is by establishing an MHIRJ Academy in West Virginia.

So far, this has been going well.

Mitchell says the first class has recently graduated and he is “optimistic that the Academy will help us overcome the supply-side challenges that we are facing”.

However, CRJs are an ageing breed of aircraft.

Embraer, in its recent market outlook, forecast that 40 regional jet aircraft would retire each year until 2030, giving the manufacturer a perfect playing field in which to market its E175s to US airlines.

However, MHIRJ remains resolute about its prospects – and those of the CRJs it manages. >>>

MHIRJ provides operational, engineering and customer support on CRJ operators’ aircraft worldwide. Image: MHIRJ



“In the medium term we do not foresee CRJs being retired,” Mitchell says. “The CRJ700/900 offer a package of economics and performance that is unmatched by the Embraer 175 and the oldest aircraft are only now reaching their half-life inspections. The fleet is likely to continue for the foreseeable future.”

One caveat is that the company will “need to begin to pivot to other aircraft types over the longer term” – something that its diversification plan is focused on doing.

Mitchell tells *LARA*: “We will only expand and diversify if we can prove that the diversification will add to our bottom line. Initially, our focus on diversification will be within the CRJ platform that we know well.”

Future options for other aircraft will come later, and only if it suits the business.

ALTERNATIVE SOLUTIONS

Over at AJW Technique, Mallette sees the ongoing situation of airlines phasing out older aircraft for newer variants as an opportunity for the business – specifically focusing on the A220.

He says: “[The A220] presents a significant opportunity for AJW to introduce new capabilities. Being based in Montreal, we are ideally located to support the North American A220 customer base.”

Mallette adds that AJW is likewise “ideally positioned” to provide component maintenance solutions, and downplays the effect this renewal might have on some of its older regional aircraft component overhaul business.

“In the medium term, we expect this to

more than outweigh any potential reductions we see in our current regional business,” he says.

Fleet renewal is also something that AMETEK MRO’s Fadili reflects on.

“We do see it as a challenge for the future,” he says.

OEM restrictions, such as limited access to technical documentation and spare parts, have an impact “especially on newer aircraft platforms, [which] can lead to less activity” for third-party MROs like AMETEK.

However, Fadili says that as a business AMETEK MRO is “compensating for the phasing out of older, legacy aircraft with a strong focus on new products” and “specialist repair schemes” which will help it to stay competitive.

AMETEK MRO also offers alternative solutions such as PMA parts (Parts Manufacturer Approval) to its customers, to help maintain its level of profitability.

PREPARING FOR THE FUTURE

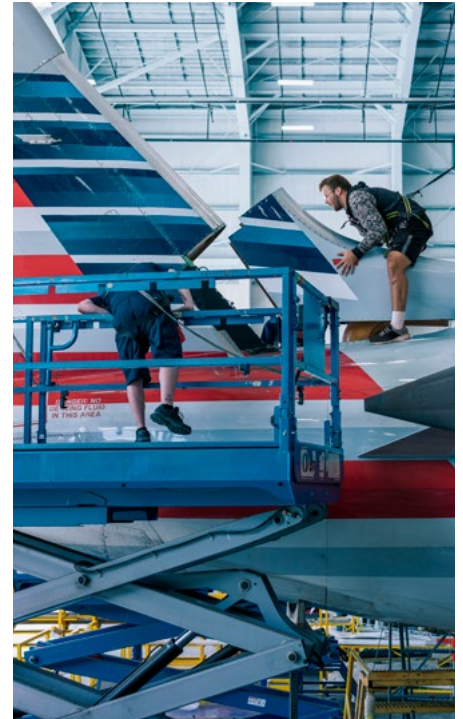
In terms of what is next, it’s a similar outlook for each of the MROs.

As airlines swap out their fleets for more eco-efficient aircraft, so must MROs move with the tide – even if newer aircraft deliveries will likely remain slow for the next two to three years.

Profitability is on the cards, Fadili says, with AMETEK “anticipating above average market growth” for the next two years.

For MHIRJ, the priority is to strengthen the company’s workforce and advance its diversification strategy.

Mitchell adds that MHIRJ would spend its



MHIRJ has established an MHIRJ Academy in West Virginia to directly address recruitment challenges. Image: MHIRJ

time concentrating on “expanding the capabilities of CR&O, initially concentrating on the CRJ market, and later exploring additional aircraft programmes.”

AJW Group is “poised for significant growth” over the next two years, with several new capabilities poised to be introduced over the next few months.

Mallette notes that collaboration with different manufacturers is high on the company’s list, mentioning its recent partnership with eVTOL company Lilium as its exclusive parts distributor for the eVTOL jets.

“[Our alliance] highlights our belief in the power of collaboration to shape the future of aviation,” he says.

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