



Widebodies see speedy recovery amid cost rises

HAECO see a strong demand for widebody aircraft base maintenance.
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The widebody market continues to see a resurgence in long-haul travel with strong demand for maintenance services especially for mid-life aircraft, but some lingering impact from the pandemic persist.

By Keith Mwanalushi

Most MROs and aftermarket players are still experiencing the impact from the pandemic on the widebody aircraft market. Jorge A. Irribarra,

Managing Director, Engine Product Lines at Kellstrom Aerospace says the lack of available assets, particularly of older platforms such as the CF680C2 and the PW4000-94 engines remain.

"These two platforms still support some passenger aircraft in service and a large part of cargo fleets around the world, while new aircraft deliveries normalise and as the widebody aircraft market recovers, and the lack of available assets continue."

As Irribarra indicates, the necessity to support faster turn-around-times, TAT, is also placing a burden on MRO spend by having the obligation

to increase facility space, workforce and acquire newer, more efficient machinery to expedite repair processes.

Certainly, the widebody market is trending towards a speedy recovery but at Kellstrom they still see market conditions still impacted by the pandemic driving up the prices of whole assets, limiting availability, and increasing MRO spend. Irribarra explains that prematurely retired aircraft or engines such as the B747-400 powered by CF680Cs and PW4000-94s engines have served as a source of spare parts to support other widebody aircraft still in service such as the B767 – "This increase of activity has forced MROs to



Jorge A. Irribarra, Managing Director, Engine Product Lines, Kellstrom Aerospace

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Jorge A. Irribarra, Kellstrom Aerospace



B747-400 powered aircraft have served as a source of spare parts to support other widebodies still in service like the B767.
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increase their capacity by concentrating their efforts on labour, capabilities, tooling, and facilities," he states.

Ongoing supply chain issues are still impacting the industry and additionally Vallair is seeing some complications from Brexit – "these are causing programmes to be deferred," notes Malcolm Chandler, Head of Commercial and Marketing. For example, he says A330 landing gear overhauls are delaying aircraft coming in



Malcolm Chandler, Head of Commercial and Marketing at Vallair

for maintenance. In addition, widebody painting capacity, is also scarce as the airlines 'catch-up'.

Vallair has been adding capabilities to its A330 MRO work in recent years much of that amid the pandemic at its new hangar in Chateauroux which caused delays with tooling, but Chandler reports that the A330 work is picking up well at Vallair with several 12-year checks, landing gear changes, and lease returns already performed. "We have also undertaken major structural repairs and modifications necessitating stress zero trestling," he comments.

At Ascent Aviation Services, they still see a lingering impact on some of the mid-life aircraft like the B777 and A330. "The modern, more fuel-efficient widebodies were the first to enter service on longer international routes. Additionally, without fully mature P2F conversion programmes, the mid-life assets have not had the transactional demand recovery as other assets," states Scott Butler, Chief Commercial Officer.

MROs like Ascent have had to retool their shops and retrain workforces to accommodate newer types of aircraft. In the last five years, the company has invested heavily into the B777, B787 and

A330 to expand the customer base and complement the B747 capabilities.

"Demand is still relatively high for widebody engines as many engines did not go through required maintenance during the pandemic. We are starting to see more demand for USM in this space as many aircraft head to disassembly," Butler tells.

Supply chain issues are greatly affecting ground time (TAT) for widebody aircraft and Butler indicates they are experiencing significant delays on all components and tooling coming from Europe, which is hampering the ability to deliver aircraft in a timely manner.

At Hong Kong-based HAECO, they see a strong demand for widebody aircraft base maintenance as recovery continues. "Airlines are reactivating their fleets as fast as possible to participate in this growth, generating high maintenance demands. For example, certain operators have reactivated their A380s to capture the recovering market. At the same time, airlines are investing in modifying or refurbishing the cabin, which has led to a growing demand for cabin modifications post-pandemic," says Jacqueline Jiang, Group Director Airframe Services.

As airlines reactivate some of their parked aircraft, HAECO are facing high demand for legacy and sunset aircraft types. "We can provide heavy checks



Scott Butler, Chief Commercial Officer at Ascent Aviation Services



Jacqueline Jiang, Group Director Airframe Services at HAECO

on most aircraft types, as well as cargo conversion services on certain aircraft types. Our focus is on meeting the customers' requirements and delivering aircraft on time with a high level of quality work and with OEMs producing newer aircraft in the market, we trust that there will be a better balance between the demand and supply of aircraft maintenance," Jinag says.

The A380's resurrection has brought back some demand for MRO services as

seen recently at Etihad Engineering which completed a six-year heavy maintenance check on the first in a series of A380 aircraft for its return to service with Etihad after a period in storage.

In Abu Dhabi, Etihad Engineering carried out removal, inspection and installation of the full aircraft cabin. According to the MRO provider, the scope of the comprehensive check included rear spar modifications, frame modifications, removal, inspection and installation of all four engines, and the inspection and servicing of a wide range of sophisticated components at the facility's dedicated workshops onsite.

Etihad Airways has since resumed some of its A380 operations to London Heathrow.

In May, Fokker Services Group (FSG) inaugurated a new widebody maintenance hangar in Hoogerheide, The Netherlands. The new facility can accommodate aircraft like the A330, A350, B787, and B777, and FSG state it will make a crucial contribution to the company's long-term objective as market demand for completion services continues to surge.

FSG made sustainability a top priority in this project, resulting in a completely electrically powered new hangar and the installation of an environmentally friendly geothermal energy system. Furthermore,



Fokker Services Group inaugurated its new widebody hangar in May. © FSG

by the end of 2023 the company will have installed photovoltaic solar power capacity on the rooftop of the hangar, reducing the dependency on external energy sources. The design of the hangar was co-developed with Gaptex, a specialist in modular architecture, using their patented lightweight system. These improvements will reduce the CO2 emissions from the construction by 75% compared to a conventional hangar.

"We are in a relentless pursuit of global excellence with strong focus on sustainability, of which this new hangar is a key milestone," Roland van Dijk, CEO of FSG stated in May. "Our cutting-edge technology, engineering skills, and centennial history are putting us in an uncontested position to become the partner of choice for the widebody airframe maintenance and completions and conversions market," he said.

Costs, engine services and component MRO

Engine MRO is constantly the biggest segment of maintenance spend but the pandemic had a drastic affect on this market as large fleets were up in storage. In 2023, however, analysts reckon engine MRO is expected to exceed 2019 levels, helping the overall MRO market to rebound.

Irribarra observes that cost planning for widebody engines has dramatically increased driven by low availability of assets, higher repair cost due to MRO's increased cost of operation, delayed new aircraft deliveries and reliability issues with the new aircrafts already delivered.



Members of the Etihad Engineering team that carried out the A380 heavy maintenance check.

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A330 work is picking up well at Vallair with several 12 year checks.

© Vallair

Meanwhile, HAECO anticipate an increasing demand for engine MRO capacity in the coming years as long-haul travel resumes and widebody engine maintenance becomes a focus for operators recovering from the pandemic.

Sandra Nieuwenhuijzen, Group Director Components and Engine Services at HAECO says most of the cost for widebody engine maintenance is materials, and the prices of materials have gone up and additionally, supply chain issues will continue to affect material costs. "We are seeing material cost mitigation trends that include an increasing demand to use exchange material or USM, and the willingness to delay the sourcing process until such material is available."

Furthermore, Nieuwenhuijzen says

removals will be deferred or delayed avoiding exposing current supply chain problem items. "Mitigation actions also include departure requests to allow the engine to remain in service with repeated on-wing inspections. Operators and lessors will also challenge their respective positions regarding lease return conditions, material requirements, and liabilities throughout the overall process," she explains.

HAECO see high demand in the MRO market, but supply chain issues are limiting available capacity. Increased lead times for materials mean less throughput of engines or components, resulting in less revenue. Nieuwenhuijzen continues to say the less continuous flow of engines and components through the MRO results in increased inefficient work practices and

higher costs – "There is also an increased effort and attention required to manage the supply chain, which further increases costs."

The widebody landscape

According to latest data and analysis from aviation advisory firm IBA, new widebody aircraft, including the A350, B787 and A330neo, are benefitting from the recovering long-haul markets post-Covid and the slow supply of new aircraft from the OEMs.

The 787-9 has received the strongest demand throughout the 787 programme, as the demand has shifted materially from the -8 to the -9 throughout. Likewise, the A350-900 has seen the most demand in its family, with orders approaching 800 and deliveries rising towards 500.

IBA observe that the mid-life widebody market also benefited from the continued resurgence in long-haul travel. Whilst IBA has yet to see a full recovery in international traffic to pre-pandemic levels, supply chains and labour shortages have shifted a focus to retaining existing fleets, reactivating stored aircraft and bringing in previous-generation aircraft to add capacity. Although storage and parking levels of the Airbus A330ceo family appear relatively high at over 20% of the fleet, there is demand for aircraft in good maintenance condition.



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