



## Narrowbodies bounce back but all trails lead to more costly maintenance

Narrowbody aircraft will lead in MRO demand and spend over the next 10 years but in the meantime, trends indicate the cost of maintenance is rising and pressure from the supply chain is mounting.

By Keith Mwanalushi

Industry forecasts are indicating that narrowbody jets will consume an ever-increasing share of total spend in every commercial MRO segment. This is clearly evidenced by the ongoing delivery trends from the major aircraft OEMs post pandemic that show the A320/A321 Neo and B737MAX families are leading the delivery tally. These will be the most predominant narrowbody aircraft by 2032.

New narrowbody aircraft supply and deliveries are recovering, but with the continuing lagging supply chain issue, there are multiple impacts to aftermarket

services, considers Waleed Sirrag, Director of Technical Services at The Aircraft Group (TAG One Inc.) He says this contributes to delays in the delivery of new aircraft, forcing older assets to remain in service longer than their forecasted retirement. "Older aircraft require more extensive maintenance and aftermarket care, which usually means higher material demand during maintenance and increased turn time during HMV due to the higher MRO manhours that need to be applied during HMVs."

Performing that maintenance is

also impacted by delays in delivery of components and parts required for repairs while in maintenance, further



Waleed Sirrag - Director of Technical Services,  
The Aircraft Group

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*Waleed Sirrag, The Aircraft Group*



delaying redelivery and increasing aircraft downtime. When factoring in the increased competition for limited available parts, Sirrag sees that prices are driven up increasing the overall cost of the maintenance visit.

“It is a compounding cycle. That said, the post pandemic recovery of demand for new narrowbody aircraft is undoubtedly a positive development for the aviation industry, as it signals a strong return to production growth and expansion but with that come challenges that need solutions,” suggests Sirrag.

At Ascent Aviation Services, they are seeing a lot more maintenance on classic aircraft that operators may have intended to retire, but cannot be due to newer generation issues, and Scott Butler, Chief Commercial Officer says these larger checks are causing their own capacity crunches across the industry.

Butler sees plenty of aircraft going beyond their expected retirements – “These checks are usually quite large and may have a lot of findings, so we need to be careful in our planning to make sure these large checks don’t impact other projects,” he states. There is also demand

for traditional heavy maintenance work and in addition, Ascent are trying to keep some MRO capacity available for storage and transition operators so that the aircraft can leave with as much green time as possible.

However, Butler observes that all trends are leading to more costly maintenance. “Supply chains are lagging; labour rates



Scott Butler, Chief Commercial Officer,  
Ascent Aviation Services

keep increasing and capacity is strained, and I don’t foresee a slowdown in rate increases in the near term either.”

Speaking to experts at Iberia Maintenance, they believe in the short term, the new aircraft deliveries don’t seem to impact heavy maintenance services, apart from OEM piece part shortages, which is an issue they face currently. Stock levels have not yet recovered and parts demand for both, new aircraft and aftermarket services, could add more pressure on providers, delaying new deliveries and extending maintenance TATs.

It’s worth highlighting two key factors that can make a difference in reducing supply chain issues’ according to revelations from Iberia Maintenance; these being expertise and deep in-house capabilities and the Madrid-based MRO stands out in both. The expertise allows the early prediction of resources and key materials required for aircraft maintenance or repair. In the coming years, Iberia Maintenance anticipates that AI-driven solutions will also improve this, but right now, this is one of the best assets to tackle the current supply chain



Many aircraft previously in storage are coming out for refurbishment and painting.

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Malcolm Chandler, Head of Commercial and Marketing at Vallair

As Chandler observes, aircraft previously in storage are coming out for refurbishment and painting, and Airbus repossessions are arriving from China ready for lessor transitions. “Yet, more are being placed in temporary storage due to engine problems. There is a lot of movement with new aircraft as well as older models,” he says.

At Vallair, they are seeing A320/A321 ceos that were scheduled to be phased out coming into their MRO centre in Montpellier for major modifications and reconfigurations. Chandler says operators are seeking an extra four years of life. Galleys, lavatories, bulkheads and other heavy-duty areas are all being replaced – “We anticipate that this variety of work will continue for a while.”

In terms of hangar space, Vallair have received plenty of late requests but there is no extra capacity. “Any delays with MRO inductions just exacerbate the problem. This situation is not stopping any time soon and it will cause operators to compromise on quality of skilled services like aircraft painting, just to get their

aircraft flying,” Chandler continues.

The experience at Czech Airlines Technics (CSAT) echoes much of the industry momentum. Chief Executive, Petr Doberský mentions lagging supply chains and long delivery dates as some of the challenges currently.

“Because these aircraft are getting older, it creates both opportunity and pain on the MRO side. Older aircraft need more maintenance which is better for MRO but concurrently, the probability of unexpected findings rises potentially causing problems in the effectivity of the

issues. Meanwhile, the deep capabilities for in-house repairs make the MRO less dependent on market changes.

Vallair, the specialists in mature aircraft support are actively working on several aircraft that were scheduled to be phased out and like all MROs are managing delays in the supply chain. Malcolm Chandler, Head of Commercial and Marketing says the company is working around these issues by developing flexible worksopes that enable Vallair to meet turnaround times.

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*Petr Doberský, Czech Airlines Technics*



Petr Dobersky, CEO at Czech Airlines Technics

repair performance and meeting TAT,” Doberský comments.

Currently, the observation at Iberia Maintenance is that supply chain issues are slowing down aircraft deliveries, which is causing an unexpected lack of aircraft to match the forecasted demand, and consequently, some airlines have decided to extend the lease contracts for some older aircraft that were originally planned to undertake end of lease process. Although this solution can solve part of the challenge, increasing the fleet availability and rising workload for the MRO, the industry must consider that the major risks are the findings associated with ageing fleets and the potential impact on TATs due to supply chain shortages.

Sirrag from The Aircraft Group notes that aftermarket service specialists and used serviceable material providers focused on older fleets can leverage their expertise in servicing older aircraft and provide cost-effective “sunset fleet” solutions. Kellstrom Technical Services Group (KTSG) for example, has a strong reputation in the industry for its expertise across broad base of MRO services like aftermarket material supply, engine repair, and MRO and HMV management through The Aircraft Group.

KTSG has developed a range of innovative solutions to extend the lifespan of older aircraft and reduce maintenance costs. Offering those types of innovative solutions, as Kellstrom does, should bring needed opportunities to provide those specialty services and help operators and MROs as the industry continues its recovery and return to per-pandemic levels.

**Dealing with hangar and MRO capacity**

Some airlines are still pulling aircraft out of storage following the pandemic but not seeing enough hangar and MRO capacity to meet the demand to return aircraft to service (RTS),

As aircraft re-enter service, the already stressed MRO HMV capacity situation has become even more critical, and labour challenges at MROs to perform RTS work continues to put additional pressure on



Iberia Maintenance are supporting operators to return aircraft back to service.

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MROs. Sirrag says the combination of increased demand to bring aircraft back into service, especially narrowbodies where the highest post pandemic demands remain, and continuing MRO capacity (slot) constraints created a backlog for RTS and HMV services.

“To address the continuing strain on MRO capacity and labour constraints, one trend has been to independently source maintenance teams from third-party providers focused on RTS work to augment available MRO labour,” Sirrag suggests. “The goal is to return their aircraft to service quicker and get them moved into maintenance sooner, wherever there is a slot. That said, even where an MRO may have room for the aircraft, they struggle to apply the needed labour in enough quantity to achieve turn times to clear the current backlog.”

It’s worth noting that most operators are already flying at pre-pandemic levels or even above, but there are still a few aircraft in park and storage conditions waiting for an available slot to be returned to operation. At Iberia Maintenance they have seen trends in heavy maintenance in Europe showing demand for MRO services is above the capacity in the market. “In our case, we always try to adapt to the needs of our customers. Last winter season, Iberia Maintenance supported its customers to increase the number of operating aircraft in their fleets and

returned into operation 38 Airbus A320 family aircraft to our customer base,” a spokesperson in Madrid revealed.

**MRO costs and external influences**

The macroeconomic pressures, especially inflation, has seen a significant effect on cost at CSAT and Doberský believes that’s the case at other MROs. “The cost of material, electricity, workforce, and so on have risen strongly and cannot be fully absorbed by higher efficiency or profit margins,” he says. Sirrag also notices costs of heavy maintenance rising. He says there is pricing pressure from every aspect that impacts MRO services; labour, material, shipping, compliance, everything that influences cost of performing heavy maintenance and from a macrocosmic basis, he does not see those easing for some time to come.

“Ultimately it is the passengers that will pay the price,” comments Chandler. “From an MRO perspective we are under pressure from airlines and lessors to keep prices steady, but we do have escalation clauses in our contracts and can always refuse the work if it is not economically viable,” he states. However, Chandler highlights that customers will often be realistic about managing the situation – “At Vallair we do our best to remain flexible and always look to find ways that we can deliver greater efficiencies and better value.”