

AGING FLEET DRIVES SURGE IN GLOBAL AIRCRAFT MAINTENANCE DEMAND AMID OEM DELIVERY DELAYS

The global demand for aircraft maintenance services is being driven by rising air traffic, with more flight hours leading to increased component wear and maintenance needs. Additionally, Freightier Trends learnt that supply chain delays in new aircraft deliveries are pushing operators to adopt "soft time" maintenance strategies to prolong the life of older fleets, further boosting demand for component repairs. Meanwhile, OEMs are expanding their global support networks, reinforcing reliance on certified maintenance facilities. As a result, CMRO and AMRO services are projected to grow steadily, with a CAGR of 2.4% over the next decade. Here are the details

What factors are currently driving the demand for aircraft maintenance services in the global market?

Menzo van der Beek, co-CEO Fokker Services Group - Global air traffic continues to climb, and with more flight hours come more component wear and higher maintenance demand. For instance, recent data from the Netherlands shows 55% of holidaymakers plan to fly this summer-up from 51% last year-while car and train use is declining. Industry-wide, CMRO and AMRO services are expected to grow steadily over the next decade, with a projected CAGR of 2.4%.

Many operators are now applying "soft time" maintenance strategies to extend the lifespan of older aircraft, especially as new aircraft deliveries remain delayed due to supply chain constraints. This shift is further driving component repair needs.

OEMs are also playing a key role in driving MRO demand. By expanding their global support networks, they ensure their customers can rely on trusted, certified facilities like Fokker Services Group. We're proud to be an Embraer Authorized Service

Center in Asia and an Airbus Corporate Jet (ACJ) Approved Outfitter-offering OEM-level quality, close to our customers' hubs.

Lastly, we're seeing increasingly stringent inspection requirements from OEMs. These include precise, non-destructive measurements to safely extend component lifecycles. In response, we've invested in advanced testing capabilities to stay ahead-delivering the same level of assurance as an OEM facility, with the flexibility of an independent partner.

Pascal Parant, Group Chief Commercial & Marketing Officer – Vallair - We are experiencing a perfect storm. Since 2019,

approximately 2,000 aircraft that were expected to be produced have not been delivered. In some ways, this is a positive outcome - had they been produced, we would now be facing issues related to overcapacity. Today's challenge lies in managing the existing fleet amid supply chain-related delays.

Passenger demand remains strong, and current-generation aircraft continue to operate, whether through lease extensions, life extensions, or transitions. This is



Menzo van der Beek

reflected in the number of aircraft retired in 2024 - around 450, one of the lowest figures in recent years. As a result, Vallair is seeing that any aircraft's operational life that can be extended is being extended. With ageing fleets and corrosion, aircraft are spending more time in maintenance hangars. Planes that were scheduled for retirement are now undergoing additional six- or twelve-year checks, which drives up demand for MRO services significantly.

Add to this the shortage of experienced B1/B2 technicians and sheet metal workers, and you have the makings of a perfect storm - demand and supply are completely out of balance. Lastly, the MRO business is counter-cyclical to airline operations: airlines fly hard in the summer and conduct maintenance during the winter. Therefore, MRO demand peaks in winter and slows in summer.

Scott Butler - Chief Commercial Officer, Ascent Aviation Services - Aging aircraft fleet is the #1 factor right now. Due to OEM delivery issues on new gen aircraft / engines, operators having to keep older aircraft maintained. The downtime on these older aircraft is significant and causing capacity issues.

Lars Moeslein, Senior Vice President, Group Commercial Asia Pacific at HAECO - Demand is driven by limited new aircraft availability from Boeing and Airbus, recent engine issues with LEAP and GTF engines, and the increasing maintenance needs of





aging airframes. Supply chain challenges and labour shortages further complicate these demands. Additionally, the post-COVID travel surge, especially in Southeast Asia and India, has heightened the need for serviceable aircraft, intensifying the overall demand for maintenance services.

How do you ensure timely availability of critical parts like wheels, brakes, and airframe components amid supply chain disruptions?

Menzo van der Beek - We maintain strong partnerships with leading OEMs-including Collins, Honeywell, and Gables-which affords us priority access to parts in today's constrained supply environment.

We also actively leverage Used Serviceable Material (USM) and operate our own in-house repair shops, giving us full control over turnaround times and allowing us to prioritize urgent customer needs while minimizing no-stock risks. At the same time, we continue to invest in expanding our inventory pool to uphold robust on-the-shelf availability.

In addition, we collaborate closely with OEMs to repair and remanufacture piece parts impacted by supply chain delays. Thanks to our Part 21J and 21G approvals, we can also design and produce certified alternatives-helping customers stay ahead without compromising airworthiness or reliability.

Pascal Parant - Wheels and brakes are important, but they're not the most critical parts - landing gear, for instance, has seen turnaround times (TATs) explode. It's important to remember that MROs are not banks. We already carry heavy capital expenditures for tooling and training. If MROs were also expected to stockpile critical parts, we would effectively become



Pascal Parant

parts trading companies.

At Vallair we consider that it is far more efficient to work closely with specialised supply partners. Parts in storage not only depreciate over time, but the cost of capital tied up in purchasing them also inflates their book value.

Scott Butler - We try to plan significantly in advance for any Hard Time & overhauled components. We work with our customers to have exchange pools and vendor Repair Orders well in advance.

Lars Moeslein - We collaborate closely with OEMs and our customers to explore all available options. Our optimized logistics, quality, and efficiency programs at HAECO enhance internal processes, providing greater flexibility and reduced turnaround times. By fostering long-term relationships with our customers, we improve slot planning and ensure transparency, enabling us to identify issues early and work

collaboratively on effective solutions.

How have U.S. tariffs or global trade policies affected MRO operations and parts sourcing?

Menzo van der Beek - The effect so far is limited, especially as currently the EU has frozen their counter measures, but it is creating a lot of uncertainty. The inflationary effects of the higher US import tariffs are now triggering down through higher prices.

Pascal Parant - Vallair has received multiple notifications from OEMs stating that current contractual list prices may be, are, or soon will be, affected by tariffs. While sourcing parts has always been a challenge, new tariffs will drive prices up and significantly complicate both accounting and logistics.

Scott Butler - We've seen custom times increase significantly at ports of entry causing delays. We are trying to source locally and plan further in advance to combat these delays.

Lars Moeslein - The direct impact of U.S. tariffs on HAECO is currently limited, as Hong Kong operates as a free trade port, and we are within a bonded zone in the Chinese Mainland. However, we are closely analysing the implications of these tariffs and engaging with various stakeholders to achieve cost-neutral outcomes. As a leading global MRO organization, we provide stability and continuity to our customers, ensuring our operations remain resilient amidst changing market conditions.

How is the shift towards narrow-body aircraft influencing your heavy maintenance services?

Menzo van der Beek - We view the shift toward narrow-body aircraft as a positive development. New-generation models like the NEO and MAX are mainly being introduced to enable new route profiles-think of long-range narrow-body flights such as the recently inaugurated Madrid to Boston, or transatlantic services from secondary UK cities that previously lacked direct connections. These aircraft are helping to expand the overall market, which is ultimately good news for the industry. That said, we expect the full impact on heavy maintenance demand to materialize gradually, as these aircraft are still relatively early in their lifecycle.

From an MRO standpoint, FSG is well-positioned to support both narrow-body and wide-body aircraft. Our hangars and shops across our 5 global facilities (3 in the Netherlands, 1 in Singapore and 1 in the US) are equipped with modular and scalable infrastructure, allowing us to adapt efficiently to different aircraft types.



On the component side, our in-house engineering expertise and certifications—including EASA Part 21J and 21G—enable us to develop and certify tailored repair solutions to meet regulatory standards. So whether it's a wide-body or a narrow-body platform, we have the capabilities to support it seamlessly.

Pascal Parant - Although narrow-body aircraft are increasingly used on certain long-haul routes, demand for wide-bodies remains strong. Between passenger-to-freighter (P-to-F) conversions and life extensions, there is still a robust market for wide-body aircraft. Additionally, geopolitical constraints such as the ban on flying over Russian airspace, environmental concerns, and rising domestic demand have made MRO providers in the Far East less attractive than in the past.

It's also worth noting that new wide-body aircraft incorporate extensive use of carbon-fibre structural components, this reduces labour hours required for heavy maintenance compared to previous generations. At Vallair, we're fortunate to operate two facilities—one dedicated to narrow-bodies and one to wide-bodies. The wide-body facility can also accommodate one or two narrow-body aircraft, although we use that option only occasionally.

Scott Butler - There is no near-term effect as Ascent offers services on nearly every aircraft type. We provide heavy checks for both Narrow & Widebody cargo aircraft.

Lars Moeslein - With capabilities for both narrow-body (NB) and wide-body (WB) aircraft at our Hong Kong and Xiamen facilities, we can flexibly transition between the two. Our new Xiamen single-span hangar will further enhance our flexibility and efficiency, allowing us to



Scott Butler

better accommodate both WB and NB slots.

How are you addressing the skilled labor shortage in MRO through recruitment, training, and retention?

Menzo van der Beek - We've taken a proactive and multifaceted approach to tackling the skilled labor shortage. On the recruitment side, we've expanded our efforts significantly, targeting both local and international talent pools. At the same time, we've implemented rapid deployment teams as part of our Continuous Improvement initiative. These teams are designed to accelerate the learning curve and convert junior-level technicians into fully operational team members more quickly and effectively.

Additionally, we're seeing clear benefits from the digital mindset of the younger generation. Their natural affinity with technology has aligned well with

Fokker Services Group's strong digitalization focus—an effort we've prioritized since becoming an independent MRO following our divestment from GKN Aerospace four years ago. This feature is allowing us to upskill faster and integrate new talent into high-performing teams more seamlessly.

Finally, with the company's heritage spanning more than a century, the name Fokker is still a household brand in the Netherlands that attracts talent and open doors for us, and I think that feature also helps create the necessary amount of interest in people pursuing technical careers.

Pascal Parant - We're addressing the labour shortage through focused recruitment efforts and partnerships with aviation schools. We've also implemented internal training programmes to bring in new talent and upskill our current workforce. To retain staff, we focus on creating attractive working conditions, offering competitive compensation, and supporting professional development. Aircraft Academy is part of the Vallair Group and provides EASA Part-147 Maintenance Training Programmes (Theoretical & Practical) for aircraft technicians and engineers. Our EASA Part-147 Approved Training Centre, and EASA Part-145 Approved Maintenance Facilities at Vallair's commercial MRO stations in Châteauroux and Montpellier – provide streamlined and integrated courses for new students as well as mature engineers upskilling to new aircraft/engine types.

Scott Butler - Skilled labor shortage is nothing new in the industry, and is something we've been overcoming for years. Ascent has a robust training program to develop new talent internally and through external partners & trade schools. We also offer continuous improvement and training to promote growth & retention once the team is onboard.

Lars Moeslein - HAECO is implementing a multifaceted approach. We are collaborating with global recruitment agencies to attract diverse talent from cities like Manila, Jakarta, New Delhi, and Dubai, while also working with government departments to ease work permit requirements for foreign workers. In addition, we have established training academies in Hong Kong and Xiamen to develop talent and are expanding partnerships with technical colleges and training institutes across the Chinese Mainland, Greater Bay Area, and Vietnam. To enhance our employer value proposition, we are making our remuneration packages more competitive, promoting diversity and inclusion, and fostering a unified workplace culture. Our efforts were recognized when HAECO was named one of the best



Lars Moeslein



companies to work for in Asia by HR Asia in May.

How do you see the future of heavy maintenance MRO evolving over the next five years?

Menzo van der Beek - Over the past decade, we've continuously reinvented ourselves. We began by leveraging the deep expertise and legacy built through supporting the global Fokker fleet, which enabled us to expand into a myriad platforms, and to become an integrated design, production, maintenance, and airworthiness organization. Our second transformation came when we moved from being a sister company within GKN Aerospace to becoming an independent MRO provider-giving us the right size, speed, and agility to consistently deliver shorter lead times than many of our competitors. That flexibility has become one of our key growth drivers and we

expect this aspect to continue acting as one of our main growth levers.

Looking ahead, we also see significant opportunity in the defense sector. While our current portfolio is approximately 80% commercial and 20% defense, that balance is beginning to shift. We are actively ramping up our role in military programs, including NATO completion and maintenance support for nine Embraer C-390 Millennium aircraft - with potential for further expansion-as well as support for the RNLAf's NH90 helicopters and collaboration on the military programs of GKN Aerospace.

This diversification not only strengthens our business but also reflects our commitment to making a meaningful social contribution. In today's geopolitical climate, strengthening defense capabilities is critical, and we're proud to play a part in that mission.

Pascal Parant - At Vallair, we expect demand to remain high. At some point, we'll likely see an increase in aircraft storage and dismantling. There's a strong chance the next major industry downturn will begin during this period, which will likely increase demand for transition checks.

Interestingly, some new-generation narrow-body aircraft appear more prone to corrosion. This may be due to environmental pressure pushing the industry to abandon highly effective but polluting treatments in favor of greener, though less efficient, alternatives. At the same time, carbon-fibre wide-body aircraft will likely continue to require fewer maintenance hours. It will be a fascinating period requiring significant adaptation to new dynamics.

Scott Butler - Ascent is in the process of SMS program implementation that will be a comprehensive approach to proactively managing our safety programs. It's designed to proactively identify and mitigate risks before they lead to incidents or accidents. Ascent is also leveraging AI & digitization to position ourselves for more accurate defect prediction that will allow us to shorten ground maintenance times.



Lars Moeslein - It currently looks stable, driven by high demand for both narrow-body and wide-body aircraft. We anticipate an increase in cabin modifications for the Boeing 787 and Airbus A350, as well as heavy checks for the A320NEO and 737MAX. Given the strong order books from Airbus and Boeing, along with fleet growth predictions in APAC, we expect further capacity to enter the market. However, the ongoing labour shortage will pose a significant challenge for MROs in fully utilizing this additional capacity.