

Eight Questions

Grégoire Lebigot – Executive Chairman of Vallair Group, an international aviation company focused on maximising the life and value of aircraft, engines and parts – speaks to *Air International* about the challenges within the industry

Question 1: The demand for commercial aviation and support for MRO companies appears to have increased continually in the last two years. Why is this and what are your thoughts as to why?

There are three reasons for this increase in demand: historical, mathematical, and commercial.

Firstly, during the pandemic, aircraft were grounded globally. Airlines of all sizes, from legacy carriers to regional operators, postponed maintenance on their aircraft to conserve cash flow while waiting for the market to rebound. The faster-than-expected surge in passenger traffic post-COVID-19 has since triggered a bow wave of maintenance, repair, and overhaul (MRO) activity in all markets. Supply chain disruptions continue to impact the efficient turnaround times that MROs strive to offer, so demand is likely to outstrip 'instant supply' for some time to come.

Secondly, even without the pandemic, the industry is facing a massive upswing in MRO activity. Both Airbus and Boeing produced more new aircraft in the

first decade of the 21st century than the total aircraft production worldwide since commercial flight began. Many of those aircraft are approaching major maintenance events.

Thirdly, some aircraft delivered in the early 2000s are reaching the age when they should be retired. Instead, due to the market recovery and continued production delays in new aircraft and engines, these older aircraft will continue to fly for much longer. This means more MRO activity on mature assets worldwide.

Question 2: With engines needing to become greener and old models being retired, what changes for the engine teardown shop have brought about new processes?

From Vallair's perspective, we do not envisage any changes to our planned strategy for the new engine shop for the foreseeable future. Yes, green engines are needed and new aircraft types, like the Airbus A320 NEO, have adopted the LEAP and GTF engines, for example. These are excellent engines but have difficulties to be surmounted, and supply

chain delays exacerbate them.

This means that classic A320 and B737 narrowbodies stay operational for longer – together with their older engine types. Vallair specialises in mature engine assets, the CFM56-5b and the V2500, which will stay in service for another 15 years. This affords a promising future pipeline for our engine shop.

Question 3: The need to recycle aircraft parts has steadily increased as airlines seek to keep the demand for parts constant and avoid the supply chain issue. What parts are most in demand by airlines?

If you can call an engine an aircraft part, I would say that engines and engine parts, along with auxiliary power units (APUs) and landing gear (LDGs), are experiencing the highest demand. They are also the highest-value parts and competition is fierce for these assets.

I have never seen the aftermarket so dynamic, and I know that some specialist engine MROs, for example, are investing in their inventory of spare parts to maximise the efficiency of their repairs





and sustain throughput within their streamlined facilities.

Additionally, there is a huge demand for landing gear parts and repair shops need help obtaining replacements from OEMs. This increases the repair cost as the market is scoured for used serviceable material (USM) and delays turnaround, impacting airline customer efficiency. Other parts, such as actuators, avionics (even latest-generation components), hydraulic systems, and nacelles, are all needed.

Question 4: The Middle East seeks to become a global MRO hub and Vallair is due to begin work in Saudi Arabia on a new MRO facility. What benefits do you believe such a facility will bring to the region, and will it impact other MRO sites globally?

The benefits here are twofold. From Vallair's perspective, working on a project like this catalyses our business growth. Similarly, Saudi Arabia has huge growth ambitions for the aviation industry across the country. Here, we are talking about an entirely new fleet where local maintenance facilities will benefit everyone. It is worth noting that currently, most Saudi airlines maintain their aircraft outside the country, so establishing new provisions for these essential services will not impact the

rest of the Middle East, which is saturated with capacity.

Question 5: Vallair offers a cargo conversion facility, but there is a need for more suitable aircraft across the industry as operators retain their current fleet. What are your views on this, and how do you intend to ensure this department remains active within your group?

It is important to acknowledge the lack of suitable feedstock for cargo conversion, and the reasons for this have already been referred to. However, this situation is only temporary, and we will be ready to take advantage of new opportunities for the narrowbody conversions of the A320 and B737 families when the time is right, and the costs of these assets warrant the conversion process. We also have to wait for the cargo market to enter an upturn cycle, which we expect will happen in 2026/2027.

In the meantime, we have an ongoing A330 E Class widebody freighter conversion capability at its brand-new state-of-the-art mega hangar in Châteauroux, France. Innovation is, and has always been, integral to Vallair's DNA, and this solution is designed to bridge the gap while operators currently wait for five years or more for full freighter conversion slots.

Vallair's E-Class solution means that loading is not done on pallets or

containers; it uses a conveyor inside the cargo hold to efficiently load and distribute individual parcels. This proven concept expedites the process and considerably reduces turnaround times.

This solution addresses current market needs and increases the asset's value because it is entirely reversible should the market change. The aircraft can easily be converted back to a passenger configuration or transformed into a freighter with a large cargo door in the future. It is a complementary alternative to the traditional freighter conversion, not a replacement.

I believe the industry will view this as a sustainable option that will keep the assets flying longer.

Question 6: Can you describe the teardown process for a typical aircraft, including the components removed and how they are processed and stored? What's the timeline for this process from when the airliner arrives at one of your facilities?

Vallair can offer some unique benefits in dismantling aircraft and engines in the heart of Europe. Frequently, lessors or airlines look for facilities in hot and dry climates to handle this activity, but weather is not a factor because we undertake the process inside our hangars. Most importantly, we are fortunate to offer a range of integrated services complementary to the teardown process on-site. These include cleaning, inspection, analysis, photography, and packing and storing all the dismantled parts.

Of particular benefit is our on-site aerostructure repair shop. Typically, asset owners are unwilling to invest in repairing these significant components because of the transport costs associated with shipping them to repair facilities. At Vallair, we can do this in the same building, so this not only saves an enormous amount of time

but is incredibly cost-effective and further sustains the lifecycle of components which would otherwise be scrapped.

Vallair is accredited by AFRA, the Aircraft Fleet Recycling Association. This ensures that quality standards are maintained throughout the entire process. As the international aerospace community continues to focus on environmental issues and landfill regulations mount, asset owners are looking for efficient, revenue-building, and environmentally sound methods for aircraft disposal. From parts distribution to dismantling through materials recycling, aerospace leaders are developing new strategies for the management of end-of-life aircraft.

Up to 15,000 aircraft will retire in the next two decades and aircraft recycling offers the aerospace industry a wide range of opportunities. Vallair aims to be at the forefront of this sector.

Question 7: What technology do you believe the MRO sector needs to introduce to become more efficient and continue to meet the industry's demands?

At Vallair we are already enjoying the advantages of being paperless. Our technicians use tablets for all maintenance tasks, easily correlating data from customers and OEMs. The team is exploring further efficiency improvements, including drone technology to perform structural inspections or aircraft undergoing maintenance.

In our engine shop, we have introduced software that utilises AI intelligence to support the diagnostics of borescope inspections. We see tremendous potential in using AI to ratify analysis and reconcile vast amounts of data and records quickly and accurately. Anything that we can do to improve efficiency is considered. However, we must also maintain quality and the personal touch. You can't build a programme for every possible



eventuality. In the MRO sector, there is always an unexpected occurrence to manage, and nothing beats experience to manage such situations well.

Question 8: Away from aviation, how do you spend your free time? Do you have any hobbies?

I used to ride horses when I was younger, but now I prefer to watch them race. My brother and I have 25 racehorses in our stable and we attend events together, enjoying the thrill of the chase and the spectacle. Having your feet on the ground when you fly as much as I do for business is nice. **AI**



CLOCKWISE FROM TOP LEFT: Airlines are struggling to get new widebody aircraft from Airbus and Boeing. It means Vallair is providing maintenance to airlines' existing widebodies to keep their fleets as large as possible and able to fly
All images via Vallair Group

Vallair has been one of the first companies within the MRO sector to introduce AI technology to assist with engine inspections

Grégoire Lebigot became president and CEO of Vallair in 2003. Lebigot began his career in aviation with Air France Industries in 1989

Vallair is a multi-faceted aviation business that maximises the life and value of aircraft, engines and parts

