

AIRCRAFT ENGINE LEASING DEMAND SOARS AS AIRLINES MAXIMISE FLEET AVAILABILITY

The aircraft engine leasing market has remained exceptionally strong over the past year, driven by supply chain disruptions, delayed aircraft and engine deliveries, and extended MRO turnaround times. Airlines continue to rely on leased engines to maintain fleet availability, particularly as newer engine programmes face technical and inspection-related challenges. This has supported higher lease rates and engine values, while older engines remain in service longer than expected. Demand is especially strong for CFM56 and V2500 engines, with widebody engine leasing also remaining resilient. Although lease rates may gradually stabilise, the market outlook remains positive as supply constraints continue to support demand.

How would you assess the aircraft engine leasing market over the past 12 months?

Valentina Pilshchikova, Engine and Parts Trading Sales Manager at Vallair -

Over the past 12 months, the aircraft engine leasing market has remained very strong. Demand for leased engines has increased due to supply chain issues, delays in new aircraft and engine deliveries, and longer maintenance turnaround times.

Airlines have needed additional engines to keep fleets operating, especially as some newer engine types have faced technical and inspection-related challenges. This has pushed lease rates and engine values higher.

At the same time, older aircraft and engines have remained in service longer than expected, further supporting demand for engine leasing solutions.

Overall, the market remains positive, and demand for leased engines is expected to stay strong in the near term as supply constraints continue.

This trend is further accelerated by the fact that some lessors can generate higher revenues by leasing engines while parking the airframe rather than leasing the entire aircraft.

Vallair also anticipate an acceleration of this phenomenon with the former Spirit fleet, as both GTF and V2500 opera-

tors continue to suffer from long induction queues and extended turnaround times.

Shane Hennessy, Director of Origination & Trading EMEA at EirTrade Aviation

- In the past year, demand remained strong across current-production and post-production narrowbody and widebody engines against a backdrop of MRO bottlenecks, material constraints, and continued entry-into-service (EIS) issues on new-technology engines (LEAP & GTF). These EIS issues have pushed fleet transitions further into the future, as operators are aiming to get the most out of their dependable CFM56-5B/-7B and V2500-A5 powered fleets due to their more predictable maintenance profiles.

Lease rates for post-production narrowbody engines (CFM56-5B/-7B, V2500-A5) could plateau soon, after a 8-10% annual compounded growth since 2020. Widebody engine demand continued, with lease demand and rates for PW4168, CF6-80E1, and Trent 700 remaining firm, reflecting resilient long-haul recovery, a lack of green-time supply, deferred retirements, and staggered fleet transitions.

Assuming full-life condition on both engines, up to 90% of an aircraft's



Valentina Pilshchikova

value can reside in the engines. As a result, part-out economics have often trumped whole-aircraft remarketing, leading to under-6-year-old A320 NEOs and 737 MAXs being torn down to deploy engines as stand-alone spares. If oil prices, and therefore jet fuel prices, stay elevated, and if more airline failures occur, we can expect further part-outs, which will lead to an increase in spare engine supply and a potential softening of market lease rates.

Anca Mihalache, Managing Director, AERO CARE

- Over the past 12 months the aircraft engine leasing market has remained strong, with demand for legacy engines exceeding supply. However, I believe we are likely to see increasing effects from the geopolitical situation, increased fuel prices, and overall uncertainty in the market in the near future.

Which engine platforms are currently showing the strongest leasing demand?

Valentina Pilshchikova - The highest leasing demand is currently for engines used on narrowbody aircraft, especially newer-generation engines such as the LEAP and GTF.





Shane Hennessy

Airlines need more spare engines because of maintenance delays, technical issues, and slow deliveries of new engines and aircraft.

Vallair observes that there is also solid demand for older engine types, as airlines continue operating mature fleets longer than initially planned. Using green-time engines, or leasing engines to keep fitted engines on wing in order to meet return conditions, has also become a common strategy to avoid expensive shop visits at redelivery.

On the widebody side, CF6-80E1 engines remain under pressure following the EGAT issue that affected approximately 80 engines although more aircraft are phased out providing spares, while Trent 700 operators continue to face limited induction slots and lengthy turnaround times.

For newer widebody platforms, whenever the aftermarket becomes heavily controlled by OEMs, the leasing market tends to be more constrained unless innovative structures can be developed, as we saw last year.

Shane Hennessy - For narrowbodies, demand for CFM56-5B and CFM56-7B remains strong. Following Spirit's collapse, EirTrade Aviation expects several more A320ceo aircraft to be torn down, which will increase the near-term supply of SelectOne V2500-A5 engines and likely soften V2500-A5 lease rates after peak summer. Further airline failures could accelerate additional A320ceo retirements, further boosting V2500-A5 supply. Lease demand for LEAP-1A and PW1100G-JM remains robust, driven by in-service reliability challenges.

For widebodies, the strongest demand lies with the Trent 772B, CF6-80E1, and PW4168, as these have resilient

long-haul recovery, limited green-time availability, deferred retirements, and staggered transitions.

Anca Mihalache - In my experience, demand remains strongest for legacy engines, with the CFM56-7B being one of the clearest examples.

How are supply chain disruptions continuing to impact engine availability?

Valentina Pilshchikova - Supply chain issues are likely to persist for several years. Pratt & Whitney itself does not foresee a full resolution before 2028, as stated in various public communications. Whether we look at production capacity or spare parts availability, supply continues to fall short of demand.

However, the real question is what the situation will look like in four months. Historically, there is often a significant lag between the emergence of a crisis and its full impact on aviation. Nine months is not uncommon.

As Churchill supposedly said, never let a good crisis go to waste. Will OEMs take advantage of a potential major economic slowdown to rebalance production and supply chains? Possibly. If not, some of the more pessimistic forecasts suggesting disruptions could last until 2030 may prove correct.

Shane Hennessy - Since 2020, supply chain issues have persisted: turnaround times are inflated, while material and skilled labour availability continue to challenge MROs. Quick-turn shop visits are taking longer due to parts scarcity and labour shortages. EirTrade Aviation believes OEM issues on new-technology engines will persist into 2030+, naturally extending the lives of CFM56-5B/-7B and V2500-A5 engines well beyond 2030 as operators seek to protect themselves financially from the uncertainty of new technology.

Anca Mihalache - Supply chain disruptions continue to impact engine availability across the entire repair cycle. The issue starts from the production of expendables and subassemblies, which delays shop repairs. It then continues throughout the entire repair chain, where many MRO providers still face manpower shortages. At the same time, the industry's shift toward newer technology engines is reducing available capacity for legacy platforms. As a result, supply chain constraints continue to significantly affect overall engine availability.

How do investors view legacy engines such as the CFM56 and V2500 today?

Valentina Pilshchikova - There are mixed feelings.



ESG considerations are encouraging many banks and financial institutions to focus their investments on newer assets. There is also uncertainty regarding the long-term impact of carbon offset mechanisms and environmental regulations. That said, at Vallair we believe the demand curve between CEO and NEO aircraft is unlikely to fully invert before 2030.

I would, however, be more cautious regarding the V2500. Its aftermarket environment is significantly more complex than that of the CFM56. The difference lies between a market that is heavily controlled by certain OEMs, and a more dynamic open market where USM can fully express its value.

As a result, private equity firms should still view CFM56-5B and -7B engines as attractive investment opportunities, generating returns through both maintenance reserves and residual material value.

Shane Hennessy - CFM56-5B/-7B and V2500-A5 engines offer highly predictable time-on-wing compared to newer-technology platforms. Liquidity remains strong, with market values rising year-on-year since 2020, and residuals and lease rates have both performed exceptionally over the last 2-3 years. That said, investors are watching Middle East geopolitics and fuel economics. In the event that jet fuel prices remain high, more airline failures could trigger additional retirements, which would soften lease rates and green-time engine values.

Anca Mihalache - Investors continue to show strong interest in legacy engines, particularly for leasing and part-out opportunities. While some investors are increasingly focusing on newer aircraft and engine platforms, demand for older assets remains solid, including engines older than the typical legacy generation.

What does the long-term future look like for legacy engines and next-generation engines?

Valentina Pilshchikova - The answer depends on what we define as "legacy" and "next generation."

If legacy means engines such as the CFM56-3, they are already approaching sunset. They may have another three to eight years ahead, but they are no longer particularly attractive investment products.

Conversely, CF6-80C2s and PW4000s may enjoy a longer future given their continued production and support for cargo aircraft and military tanker programmes.

If legacy includes the V2500, CFM56-5B, CFM56-7B, CF6-80E1, GE90, Trent 700 and PW4168 family, then Vallair

considers that these engines still have a solid 15 years ahead of them. In that context, legacy engines should continue enjoying favourable market conditions until at least 2030, after which they will likely follow the traditional aviation cycle of peaks and troughs driven by economic and industry crises every three to six years.

If next-generation engines include LEAP, GTF, GENx, Trent XWB and similar products, then they are only at the beginning of their lifecycle. Once today's teething issues are resolved, they should provide investors with excellent assets for the next 20 to 25 years.

Shane Hennessy - Post-production engines (CFM56-5B/-7B) should perform strongly into the middle of the next decade, anchored by freight, secondary carriers, and regions with slower fleet renewal. However, this may taper from 2035 onwards.

USM availability will extend viable life and keep maintenance economics attractive. LEAP-1A and GTF have well-documented teething issues, rendering their future dependent on how quickly and effectively OEMs can provide fixes. Should jet fuel prices continue to rise, the fuel-burn advantages of LEAP/GTF may accelerate transitions. On the other hand, if fuel prices decline, aircraft powered by CFM56-5B/-7B and V2500-A5 will remain attractive for longer.

Anca Mihalache - Demand for newer generation engines continues to grow year by year as new aircraft enter service. At the same time, legacy engines will remain an important market share for as long they can be properly supported and repaired, particularly in terms of spare parts availability. We are already seeing longer shop visit times on platforms such as the CFM56-5A, with some parts no longer produced by OEMs and becoming increasingly difficult to source in the market.

How is the USM market evolving in the current environment?

Valentina Pilshchikova - The current environment is defined by the following emerging trends as a result of parts shortages, long repair lead times and delayed aircraft deliveries:

- Airlines are increasingly relying on USM to keep aircraft flying.
- Demand remains particularly strong for mature engine platforms such as the CFM56, CF6 and PW4000. This is especially true wherever the aftermarket remains open and competitive. As opposed to a monopolistic environment where OEMs control more than 85-90% of repair shop capacity and over 90% of parts repairs.



Anca Mihalache

- Green-time engine leasing has become increasingly valuable, particularly where OEM control limits aftermarket flexibility.
- Teardown aircraft and engines remain highly valuable because of the demand for their components. However, with the current economic uncertainty and increasing availability of assets, such as those resulting from the Spirit liquidation, we are beginning to see pricing soften. As always, it is a matter of supply and demand.
- OEMs, lessors and MROs are becoming increasingly active participants in the aftermarket and parts business.

In this environment, Vallair observes that the USM market is continuing to grow with strength. USM has evolved from simply a cost-saving option to an indispensable tool for engine maintenance strategies and, ultimately, maintaining fleet availability.

Shane Hennessy - Airlines face uneven supply chains, extended OEM lead times, and higher operating costs, which provides steady demand for USM. EirTrade focuses on stocking the most in-demand parts so that timely availability can avert AOGs and defer costly shop visits. In recent years, we have torn down major asset types across airframes and engines (777/787 families, A320 and 737 families; CF6 and CFM engines). By targeting strategic teardowns, holding certified inventory near major MRO hubs, and aligning material flows with live shop capacity, EirTrade can provide predictability without locking operators into OEM queues, which shortens maintenance turnaround despite ongoing MRO bottlenecks.

Anca Mihalache - The USM market contin-

ues to see strong demand both for legacy engines and newer technology platforms. High global flight activity is driving demand for engines, shop visits, and specific engine parts. At the same time, there remains a large amount of material available for less desirable platforms and configurations.

How are geopolitical challenges affecting engine supply chains globally?

Valentina Pilshchikova - Geopolitical tensions are creating additional pressure on engine supply chains worldwide.

Sanctions, trade restrictions and shipping disruptions are making it more difficult to move parts and complete repairs efficiently. As a result, airlines and lessors are keeping engines in service longer and relying more heavily on MRO providers and USM solutions to keep fleets flying.

Anca Mihalache - Geopolitical tensions are continuing to impact global engine supply chains through transportation delays, uncertainty around tariffs, and changing import conditions, particularly in the US market. In my opinion, more significant effects may still emerge if the current situation persists.

What strategies are airlines using to maximise engine utilisation?

Valentina Pilshchikova - As a result of these now infamous parts shortages, supply chain challenges and delivery delays, airlines are focusing on extending the life of existing engines; this means delaying retirements, prioritising repairs and minimising downtime. To do this, Vallair sees airlines increasing the use of USM to reduce repair costs and turnaround times, leasing green-time engines to bridge maintenance periods, and working closely with MROs and lessors to secure shop capacity and parts availability.

Vallair have identified parts availability as a major priority, as we have even

seen airlines tearing down relatively young aircraft to support fleet operations. Swiss, for example, disassembled two A220-100s and plans further actions to support its larger A220-300 fleet to mitigate the impact of GTF-related issues. Emirates and several other operators have also dismantled A380s to support ongoing operations.

In short, airlines are focusing on flexibility and faster turnaround times, and they are achieving that by improving access to spare engines and components.

Shane Hennessy - Amid constraints, airlines are extracting more from post-production engines, notably CFM56-5B/-7B and V2500-A5. We have seen an increase in short-build engines where LLP stacks are rebuilt to sub-3,000 flight-cycle limits to bank green time through peak seasons, increasing module swaps (fan/HPC/HPT) and engine exchanges to avoid full teardowns. Airlines will also use quick-turn shop visits and defer performance restorations until material and capacity align. Carriers are also extending leases and using short-term green-time rentals to bridge shop visits.

Anca Mihalache - Airlines are increasingly focusing on on-wing repairs, hospital shop visits, and OEM-approved life extensions to maximise engine utilisation. This is mainly driven by limited availability of short-term engine leases, as well as the rising costs associated with engine shop visits.

What major shifts do you expect in the engine market over the next 5-10 years?

Valentina Pilshchikova - We can expect smarter fleet and engine management strategies designed to optimise green-time utilisation and avoid costly engine shop visits.

Older-generation models such as the CFM56-3 will gradually exit the market. At the same time, the curves of mature platforms such as the CFM56 and V2500, and newer platforms such as the LEAP and

GTF, will inevitably cross, with one declining while the other continues to rise.

As the GTF crisis eventually resolves, we may see a temporary oversupply of spare engines entering the market.

More broadly, we can expect continued growth in demand for MRO services, spare engines and USM, alongside further expansion of engine leasing and green-time leasing activities. This is because supply chain challenges and OEM production constraints are likely to remain key features of the market for the foreseeable future.

Environmental considerations will increasingly influence investment decisions, although investors and airlines will continue to balance ESG objectives against operational realities and economic returns. In aviation, pragmatism often prevails over ideology.

We should also expect a growing use of predictive maintenance, artificial intelligence and data analytics to optimise engine performance, maintenance planning and asset management. Better anticipation of shop visits and component removals will become a significant competitive advantage.

Finally, the question of aftermarket access will remain central. The level of OEM control over repairs, parts manufacturing and technical data will continue to shape the economics of engine ownership, leasing and USM. Vallair believes the industry's ability to maintain a competitive aftermarket environment may ultimately prove as important as technological innovation itself.

Shane Hennessy - We have seen a relatively new phenomenon in the last 12-24 months with the early teardown of new-technology aircraft, including frames as young as two years old, to monetise the engines. This is economically rational today; however, it may reshape the ecosystem once OEM reliability improves and supply chains issues and MRO capacity ease up. As more serviceable engines and green-time cores accumulate relative to active aircraft, certain asset types could show abnormally high spares ratios past 2030.

Anca Mihalache - Over the next 5-10 years, demand for legacy engines is expected to gradually decline, however an active market for them will remain. At the same time, newer-generation engines will continue gaining market share and will become the main platforms in demand. However, the geopolitical situation continues to create uncertainty regarding both engine availability and long-term market requirements. The pandemic also demonstrated that, despite aviation traditionally being viewed as a stable industry, market conditions can change very quickly and unpredictably.

