# CFM56 MAINTAINS MOMENTUM WHILE LEAP ACCELERATES MRO GROWTH

## SUSTAINED INTEREST IN BOEING 737NG AND AIRBUS A320CEO SPURS CFM56 MRO DEMAND

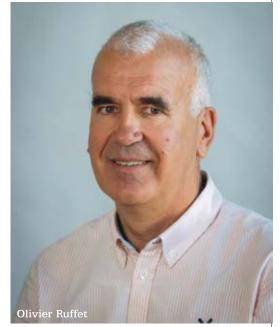
Demand for CFM56-powered aircraft, particularly the Boeing 737 Next-Generation and Airbus A320ceo families, remains strong as operators continue to seek dependable assets to address ongoing capacity gaps. Freighter Trends learnt that this trend is driving sustained growth in demand for CFM56 maintenance, repair, and overhaul (MRO) services. At the same time, CFM LEAP engines are seeing rapid adoption — the fastest in commercial aviation history — further increasing the need for expanded MRO capacity. In response, CFM is scaling up its global LEAP MRO network. Market forecasts project that annual shop visits for CFM56 engines will peak in the coming years, underscoring the long-term demand for both CFM56 and LEAP engine support.



What are the key factors driving increased demand for CFM engine MRO services today?

Gaël Méheust, President & CEO of CFM International - We're seeing high demand continue for CFM56-powered aircraft, namely Boeing Next-Generation 737 and Airbus A320ceo family aircraft. This is as operators seek reliable assets to fill gaps in capacity. In turn, this is continuing to drive high demand for CFM56 maintenance, repair, and overhaul (MRO) work.

At the same time, we continue to see high demand for aircraft powered by CFM LEAP engines, which have experienced the fastest ramp in commercial aviation history. To meet the associated growth in demand for MRO services, CFM has been growing LEAP MRO capacity. Most recently, CFM parent





companies GE Aerospace and Safran Aircraft Engines announced further investments, which total more than two \$2 billion USD over five years to help CFM meet its existing customer commitments.

To expand capacity further, CFM has been fostering an open MRO ecosystem in which third parties compete for MRO work. These take the form of both Premier MRO providers and other third-party shops who compete with CFM and each other for overhauls. There are currently six Premier MRO CFM, CFM56, LEAP, RISE, and the CFM logo are trademarks of CFM International, a 50/50 joint company between GE Aerospace and Safran Aircraft Engines. providers: Air France Industries KLM Engineering & Maintenance, Delta TechOps, MTU Maintenance Fort Worth, Lufthansa Technik, ST Engineering, and StandardAero.



Olivier Ruffet (Vice President Sales – Europe, Middle East & Africa (EMEA) & Lessors), StandardAero - Demand for CFM56-7B MRO services remains strong for several reasons, including 1) the utilization of the global Boeing 737NG fleet remaining high as the type is used to offset the GTF grounding and new-gen narrowbody production constraints, 2) the lack of green time engine assets due to operators running-out the available onwing life of their engine assets, and 3) the dedicated 737NG freighter fleet growing as the type displaces older 737 Classics in service.

#### David Settergren, VP Business Development Asia, SR Technics -

According to market forecasts, annual shop visits of CFM56 engines are still expected to peak in the coming years, which clearly underlines the ongoing demand for CFM engine MRO services.

When it comes to the Asian market, it has already recovered to pre-

COVID levels and is once again showing strong growth. At the same time, delays in new aircraft deliveries and technical issues with new-generation engine and aircraft platforms have forced many operators to continue operating, and in some cases even expand, their older-generation fleets. This has effectively extended the maturity curve of the CFM56 by several years. At SR Technics, we recognize this trend and remain fully committed to supporting our customers, while continuously aligning our services with evolving market developments.

David Kalda, VP & GM BEDEK MRO - The new-generation LEAP and GTF engines were intended to replace the CFM56-7B/5B fleet. In practice, however, these new engines are being removed from the wing and sent to the shop much earlier than expected, while CFM56 engines, which were initially planned to operate until end-of-life and then be phased out, are now undergoing additional shop visits to sustain



## FREIGHTER TRENDS

### GFM ENGINES OVERHAUL



flight operations.

Jean -Louis Forest, SVP Group Engine Product at AFI KLM EGM - A large, A320 FAM and B737NG aging fleet flown harder and kept longer, in relation with A320neo/ B737 MAX and supply-chain constraints, plus freighter growth and a tight aftermarket, including scarcity of USM.



CFM56 remains the dominant inservice narrowbody engine family (20k+ engines in service; 600+ operators, 34k+ delivered), so even "normal" shop-visit rates translate into high absolute volumes.

Aging engines hitting life-limits – Heavy shop visits for CFM56 are peaking around 2025 as time-on-wing/LLP thresholds are reached across the -5B/-7B

fleets.

New-aircraft/engine delivery delays – Supply-chain bottlenecks and slower-than-planned narrowbody deliveries force airlines to keep A320ceo/737NG aircraft in service longer, driving additional overhauls. GTF (PW1100G) disruptions shifting flying to ceos – Neo groundings and availability issues have kept more A320ceos (CFM56-5B) active and flying harder, increasing shop visits. Freighter growth (esp. 737-800BCF) – Rising 737NG freighter conversions/utilization sustain demand for CFM56-7B maintenance.

Tight USM & shop capacity — Scarce used serviceable material and long MRO backlogs push operators towards more (and deeper) visits, sustaining high demand. High engine values & limited "green-time" — Elevated CFM56 lease/asset values and fewer cheap swap options drive owners to repair rather than replace.

Eric Von Son, Repairs Manager – EirTrade Aviation - Supply chain and technical issues with the B737Max and A320NEO aircraft types have extended the lifecycle of the B737NGs and A320CEO family. As a result, additional/unplanned maintenance is required on the engines that propel these aircraft types, increasing the business volumes of MRO shops involved.

How is the global supply chain impacting turnaround times for CFM engine maintenance and overhauls?

Gaël Méheust - CFM and its parent companies are applying continuous improvement methodologies at their own facilities and helping key suppliers with similar efforts. This diligence is yielding

slow but steady progress. Despite a dynamic geopolitical environment, CFM parent companies GE Aerospace and Safran Group are both seeing supply chain improvements during their second quarter earnings calls.

Olivier Ruffet - CFM56-7B MRO turnaround times are being impacted by the global supply chain in various ways: in addition to the lingering impact of the Covid-19 pandemic on the supply chain (especially smaller suppliers), the supply chain is having to ramp-up to meet the demand of CFM LEAP production and support, while continuing to meet the inservice requirements of CFM56-7B operators. This has led to longer lead times for certain components, thereby impacting TATs. Component repair and used serviceable material (USM) does offer some relief in such situations, but component repair shops themselves are dealing with high levels of demand, while high quality USM is becoming increasingly difficult to locate.

David Settergren - The global supply chain was heavily disrupted by the COVID-19 pandemic and the overall situation in Europe. While turnaround times are still far from the levels seen in 2018 and 2019, they have been gradually improving over the past year.

In addition to material availability, one of the main challenges remains securing the right people and resources to manage the increasing workload across multiple engine platforms. While one platform is gradually ramping down, another is rapidly ramping up, which means that for a certain period the industry faces a high workload on both in parallel.

At SR Technics we can repair approximately 90% of the CFM parts inhouse and we have a robust used serviceable material program. These two combined make us competitive globally despite being in a country with high costs.

David Kalda - Production lines for OEM spare parts and subcontractor repair capacities have been reallocated to prioritize support for the new engines, resulting in diminished resources for the legacy fleet. This shift from the original plan, combined with the sustained demand for legacy engine support, has led to a growing shortage of spare parts and placed considerable strain on repair facilities. Consequently, turnaround times for both new and mature engines have risen significantly.

Jean -Louis Forest - Global supply chain constraints are having a direct and significant impact on CFM56 MRO turnaround times (TATs). Key effects include:

- \* Longer shop visit durations Shortages of critical parts (blades, seals, bearings, LLPs) are extending overhauls by several weeks to months, pushing TATs well beyond pre-COVID norms.
- \* USM scarcity and high pricing Airlines/MROs are struggling to source used serviceable material, leading to delays in module assembly and forcing reliance on slower new-production parts.
- \* OEM production bottlenecks Safran and GE have acknowledged difficulties in scaling parts output, which has limited the ability of repair shops to process engines on schedule.
- \* Increased induction backlogs Many independent and OEM-affiliated MROs report long queues; some airlines are waiting months just to induct engines into shops due to capacity constraints.
- \* Rising cannibalization & green-time leasing Operators unable to wait for long overhauls are swapping in engines from parked aircraft or leasing "green-time" units, but even these are scarce, keeping engines in shop longe.
- \* Regional disparities Asia-Pacific and Middle East shops report especially long TATs due to heavier regional fleet growth



and parts supply prioritization for LEAP programs.

Overall impact: CFM56 shop TATs that used to average  $\sim$ 60–80 days are often exceeding 100–150 days today, with some complex overhauls stretching even longer, as parts shortages and capacity crunches ripple through the supply chain.

Eric Von Son - Although the supply chain for CFM engines is improving slightly, the demand for maintenance on this engine



type is increasing at a similar, or even slightly faster pace, resulting in longer engine MRO TATs than during the pre-Covid years. At EirTrade we consider the fact that engine MRO facilities are also redirecting efforts and resources to the newer engine types is continuing to put pressure on overhaul TATs of the CFM56 engine family.

What role does leased engine availability play in managing overhaul downtime? Gaël Méheust - CFM56 and CFM LEAP engines enjoy some of the industry's highest engine utilization rates in the single-aisle market. Engine availability depends on many factors, two of which are spare engine availability and time on wing.

CFM spare engines are available from a variety of sources: airline purchased spares, the CFM lease pool, and third-party lease pools. As operators expand their fleets and approach performance restoration shop visits (PRSVs), the need for spare engines is growing. To address growing requirement, CFM and its customers are working to increase the supply of spare engines. For example, CFM and Engine Lease Finance Corporation (elfc)recently announced an agreement for the purchase of 50 LEAP spare engines for elfc's lease pool. We're also addressing time on wing through a high-pressure turbine (HPT) durability kit, which we introduced for LEAP-1A engines (for the Airbus A320neo family) at the end of 2024, and which we're now shipping in all new and overhauled engines. We expect the new hardware to extend time on wing more than 2x, particularly in harsh environments, in line with our industryleading CFM56 performance.

Olivier Ruffet - Short-term engine leases are very important for those operators who lack immediate in-house spare engine capability, since the use of lease engines avoids AOG situations while an engine is in the shop for overhaul.

David Settergren - When operators lack sufficient spare engines to cover a shop visit, leased engines become essential to keeping aircraft in service during maintenance. However, the lease engine market has been very tight over the past few years, making it increasingly difficult to secure certain engine types to support the fleet.

David Kalda - Lease-pool spare engines are primarily used to cover capacity gaps during shop visits. However, under the current operational landscape, the availability of leased engines is falling short of demand across both new and legacy fleets. This shortage, paired with the growing risk of aircraft being grounded due to a lack of engines, has driven a sharp increase in both leasing and overhaul costs.

Jean -Louis Forest - Bridging long TATs – With overhauls now often exceeding 100–150 days, leased engines allow airlines to keep aircraft flying while their own engines are in the shop. Without them, aircraft would sit grounded for months.

- \* Flexibility in fleet utilization Leasing enables operators to swap engines strategically between aircraft, maximizing fleet availability even when shop visit scheduling slips.
- \* Mitigating supply chain bottlenecks In situations where LLPs or key parts are delayed, airlines can lease in green-time engines to cover operations until their

original engines are fully repaired.

- \* Cost management tool While lease rates for CFM56s have surged (due to tight supply and strong demand), they still help avoid the much higher costs of lost flying time and revenue.
- \* Market pressure point The scarcity of available leased engines itself has become a driver of higher MRO demand, since operators unable to secure spares must push ahead with deeper shop visits instead of defering them.
- \* In short: leased engine availability is now a critical enabler of operational continuity during long overhauls—but the pool of spare CFM56s is shrinking as airlines keep aircraft longer and freighter conversions consume airframes. This makes leased engines both more valuable and harder to secure.

Eric Von Son - The availability of leased or spare engines can impact any aircraft maintenance downtime significantly. The current shortage of available spare engines is putting pressure on the MRO/aircraft downtime cycle.

# How is the increase in LEAP-powered aircraft deliveries affecting aftermarket support demand?

Olivier Ruffet - Deliveries of LEAP-powered A320neo and 737 MAX family aircraft are having a range of impacts on CFM56-7B aftermarket demand. On the one hand, such aircraft are gradually replacing 737NGs (and A320ceos), though 737NGs are finding strong demand from secondary and tertiary operators (as well as providing important back-up capacity for newgeneration types). As such, the increase in availability of green time CFM56-7B engines and USM which might be expected has yet to be realized. The rapid ramp-up in demand for LEAP-powered types is also maintaining pressure on CFM's supply

chain, which is at the same time working to meet the aircraft OEMs' new engine rampup demands.

David Settergren - Globally, as LEAP-powered aircraft gradually enter service and replace older-generation fleets, the share of CFM engines in active operation will slowly decline. Some aircraft will be parted out, strengthening the used serviceable material market, while others will continue flying with operators who prefer the lower acquisition cost of oldergeneration platforms.

When we talk about SR Technics, we are actively expanding our capabilities for the LEAP and GTF engines. We have reactivated and continuously upgraded our second test cell at Zurich Airport, equipped for PW1100G-JM (GTF), LEAP-1A/B, and CFM56 engines, with a capacity for more than 200 engine tests annually. In parallel, we entered the Pratt & Whitney GTF MRO network through a ten-year agreement covering more than 1,000 engine shop visits, while continuing to fully support legacy platforms such as the CFM56-7B and -5B.

David Kalda - With the ramp-up in LEAP engine deliveries and OEM-introduced improvement kits, a reduction in shop congestion is expected. However, engine removals continue to occur earlier than projected, driven by environmental conditions and other operational challenges. In response to the sustained high demand for LEAP overhauls and the limited availability of overhaul facilities resulting in extended turnaround times IAI has expanded its infrastructure to ensure more efficient service and reduced turnaround times for our customers

Jean -Louis Forest - LEAP deliveries are increasing aftermarket demand in the short

term for spare engines, line maintenance, and OEM-managed support, while also intensifying supply chain pressures on CFM56. The long-term effect will be a major redirection of MRO demand towards LEAP over the next decade, as the first wave of shop visits begins from 2025 to 2030.



Early-stage aftermarket still limited – Most LEAP engines are relatively new (first entered service in 2016), so demand today is focused on line maintenance, repairs, and spare parts provisioning rather than full overhauls. Shop visits typically won't ramp up until the late 2020s.

OEM-driven support model – CFM has retained tighter control of LEAP aftermarket through long-term service agreements (e.g., "Rate per Flight Hour" programs), meaning more early revenue flows to GE/Safran than to independents. This reduces short-term opportunities for third-party MRO providers. Nevertheless, in a second step the "premier MRO" network should be in a position to increase the market share of independents.

A Supply chain stress spillover – LEAP spare parts production is competing with CFM56 for manufacturing resources, contributing to shortages in both programs. This has knock-on effects: airlines flying ceos/NGs longer (increasing CFM56 shop visits) while LEAP operators push OEMs for better spare engine coverage.

Growing spare engine demand – With in-service reliability challenges and early teething issues, operators are requiring larger LEAP spare pools than initially forecast. This is boosting short-term leasing and parts demand.

Long-term shift in market share – By ~2028, LEAP engines are projected to surpass CFM56 in active flight cycles,



which will steadily flip aftermarket demand toward LEAP. The ramp-up in heavy shop visits will then drive a structural shift in MRO market revenues.

Eric Von Son - The supply chain for the older generation engines like the CFM56 and V2500 will come under more pressure because the OEMs and other new part manufacturing facilities will move more capacity and resources to the newer engine types like the LEAP and GTF, thus reducing the availability of new spare parts for the CFM/V2500 engine families. EirTrade foresees that this situation will continue until the deliveries of the newer aircraft types meet the market demands.

#### What is the significance of durability kits in extending engine life between overhauls?

Olivier Ruffet - Durability enhancements can play a significant role in keeping engines on wing. In the case of the CFM56-7B (and -5B), the upgraded high-pressure turbine (HPT) blade introduced in 2023 is delivering improved reliability and durability, and extending the blade's life by up to 25% in certain operating environments. At the same time, the enhanced HPT blades – over 1,000 sets of which have now been delivered – are maintaining the fuel burn benefits associated with the CFM56 Tech Insertion (TI) blade configurations launched in 2007.

David Settergren - All new engine types inevitably go through a period of growing pains. As issues are identified, OEMs develop solutions in the form of fixes or durability kits. These kits are installed on new engine types and, as history with legacy engines has shown, this process will continue for decades to come.

David Kalda - LEAP improvement kits provide a targeted solution to current inservice challenges, contributing to enhanced engine performance. While LEAP engines have yet to achieve the "time-onwing" performance of CFM56-7B/5B engines during the initial phase, these upgrades bolster resistance to environmental factors, such as sand and contamination. This helps extend engine life and improve reliability throughout the service phase.

Jean -Louis Forest - CFM LEAP durability kits are designed to correct early-life reliability concerns and extend engine life on-wing, which delays heavy shop visits, lowers total MRO spend in the first decade of operation, and boosts fleet availability.



They're a bridge to maturity for the LEAP program, much like product improvement packages (PIPs) were for the CFM56.

CFM LEAP durability kits are a big part of how CFM is addressing the reliability and life-cycle cost of its newgeneration engines. Their significance lies in a few key areas:

Addressing early durability issues – Some LEAP operators experienced premature wear (e.g., in hot-section components, combustor linings, turbine hardware). Durability kits introduce design and material upgrades to mitigate these problems, extending on-wing time.

Extending time-on-wing – By improving resistance to erosion, oxidation, and thermal fatigue, the kits allow LEAP engines to run longer before hitting

performance or maintenance limits. This helps reduce unplanned removals and stretches intervals toward the intended 20,000+ flight cycles.

Reducing shop visit frequency – Each avoided or delayed shop visit can save airlines millions in direct MRO costs, not to mention downtime. Kits help bridge operators toward first overhauls at a more typical cycle/time rather than prematurely.

Boosting fleet reliability – More predictable time-on-wing supports fleet planning and keeps spare engine demand manageable. For airlines with limited spare coverage, this is critical to avoid operational disruptions.

Strategic OEM tool – By rolling out these kits, GE/Safran reinforce their aftermarket role, since operators often need





to incorporate them during OEM-managed shop visits or service agreements. It ties operators more closely into CFM's support ecosystem.

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## How are next-generation engine programs influencing today's CFM engine MRO strategies?

Gaël Méheust - For the CFM RISE program, we're testing durability earlier than ever in new technology development. In early 2025, GE Aerospace completed over 3,000 endurance test cycles on next-generation high-pressure turbine (HPT) airfoil technologies, demonstrating improved

durability and fuel efficiency under simulated flight conditions, and Safran Aircraft Engines achieved major milestones in the technological readiness of large-diameter fan blades developed for the Open Fan architecture.

The RISE program is advancing a suite of pioneering technologies, including advanced engine architectures like Open Fan, compact core, and hybrid electric systems. The RISE program targets more than 20% better fuel burn compared to the most efficient commercial engines in service today, while meeting expectations for durability.

Olivier Ruffet - While next-generation engines are delivering impressive fuel

burn improvements, they are at the same time highlighting how impressive the CFM56-7B's reliability is. Given the fact that CFM56-7Bs will be flying for decades to come, we can expect to see the type benefitting from technology enhancements spun off from the LEAP program.

David Settergren - Next-generation engine programs will gradually replace current-generation platforms, with the pace largely depending on new aircraft deliveries. In the freighter segment, this transition is expected to progress more slowly compared to the passenger market.

SR Technics have a balanced approach: ensuring operational agility and quick-turn capabilities for established platforms such as the CFM56, while at the same time expanding our capacity for next

generation engine programs. This strategy allows us to remain a reliable partner for our customers and to adapt to evolving market demands in a sustainable way.

David Kalda - OEMs must continue supporting the mature engine fleets beyond their original planning assumptions. This extended support requirement directly impacts material lead times and shop visit turnaround times worldwide.

Jean -Louis Forest - The challenges of introducing LEAP and GTF engines are prolonging CFM56 MRO demand while also tightening parts availability. Operators and MROs are adapting by sweating CFM56 assets harder, leaning on USM, and managing shop visits strategically — knowing this is the final major peak before the aftermarket shifts decisively to LEAP and GTF in the late 2020s.

Extended Life of CFM56 Fleets, persistent GTF durability issues and LEAP supply-chain delays mean many airlines are flying their A320ceos and 737NGs longer than planned. This drives higher CFM56 shop-visit demand in the near term, since retirements are being deferred.

Shop Visit Planning & Resource Allocation, MRO providers must balance capacity between heavy CFM56 workloads (peaking now) and early LEAP/GTF workscopes (line maintenance, module repairs). Some independents are delaying LEAP investment until volumes justify it, while prioritizing CFM56 to capture the current "last big wave" of demand.

Shift in Materials Strategy, parts scarcity is worsening as OEM suppliers prioritize LEAP/GTF production over legacy CFM56 parts.This forces CFM56 operators



to rely more on used serviceable material (USM), creative repair schemes, and lifelimited part harvesting to keep costs manageable.

Leasing & Spare Engine Dynamics, because LEAP and GTF availability is tight, more operators seek leased CFM56 spare engines to cover flying, raising lease rates and limiting availability. This reinforces the need for efficient CFM56 MRO turnaround to minimize dependency on scarce spares.

Strategic Timing of Transitions, Airlines are carefully weighing green-time CFM56 usage versus early investment in LEAP/GTF support packages. Many are deferring LEAP/GTF aftermarket exposure by maximizing CFM56 life, effectively stretching the legacy engine's economic value.

OEM Positioning, GE/Safran and

Pratt G Whitney are using their next-gen programs to lock in aftermarket agreements (e.g., "power-by-the-hour") that weren't as common in the CFM56 era. This means airlines face a more OEM-centric aftermarket in the future, which affects today's CFM56 strategies (e.g., independents trying to maximize last-cycle business).

Eric Von Son - As more CFM MRO shops are setting up for the next generation engines, they will shift capacity away from the traditional CFM lines. This in turn will result in a reduction of available CFM

slots, longer TATs and higher engine overhaul prices. This situation will persist until the moment that it is no longer financially attractive to keep the older CFM engines and CFM powered aircraft in service.

What trends are shaping the future of CFM engine maintenance over the next 3–5 years?

Gaël Méheust - We see three trends: first, the continuing demand for CFM56-powered aircraft, approximately 40% of which have yet to have their first shop visit. At the same time, we continue to produce CFM56-5B and -7B spare engines, and we're supporting low-rate production of new -7B engines for programs like the P-8 Poseidon and Boeing E-7 Wedgetail.

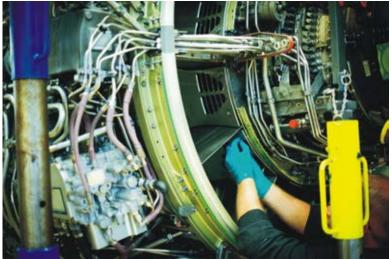
Second, for CFM LEAP engines, we expect the installed base to increase dramatically by the end of the decade. At the same time, the open MRO ecosystem will continue to grow and mature, with Premier MRO providers and other third parties taking on an increasing number of shop visits.

Third, we'll continue to build on the progress we've made in MRO

capabilities. We're developing more than 250 new LEAP engine repairs in 2025, with a focus on the hot section as we prepare for PRSVs. We're also seeing results in advanced MRO technologies that are decreasing processing time and increasing throughput. In one example, an AI-enabled blade inspection tool (BIT) is cutting HPT blade inspection times in half.

Olivier Ruffet - One notable trend is the increasing popularity of exchange engines, driven in part by a desire to minimize maintenance TATs, and in part by interest in shorter build cycles.

David Settergren - One of the key trends will be the increased availability of used serviceable material, which will play an important role in keeping engine overhaul



costs under control.

In addition, we see significant opportunities in delivering cost-optimized transition and end-of-life services, such as green-time engine management, teardown planning, and material harvesting.

These services are increasingly in demand from lessors and operators managing fleet phase-outs and will continue to shape the market over the next years.

David Kalda - Looking ahead, most of the current durability and reliability challenges facing new-generation engines are expected to be addressed by OEMs within the next five years. As a result, demand for legacy CFM56 support is anticipated to taper off, with a three- to five-year delay relative to the industry's original projections.

Jean -Louis Forest - Over the next 3–5 years, CFM56 maintenance will be defined by a high but tapering shop-visit cycle, persistent supply chain and TAT pressures, greater reliance on USM, and sustained demand from freighter conversions. The aftermarket will remain robust, but the industry is simultaneously preparing for the

eventual pivot to LEAP/GTF dominance in the 2030s.

Peak and Gradual Decline of Shop Visits - The CFM56 aftermarket is currently at its historic peak (2024–2026) as engines hit life limits.

After  $\sim$ 2027, shop visits will begin a slow decline as LEAP fleets take over, but absolute volumes will remain high due to the size of the installed base.

Supply Chain-Driven TAT Pressure - Parts shortages (LLPs, hot-section components) will keep turnaround times extended well above pre-COVID norms. Operators will increasingly rely on modular repairs, cannibalization, and engine swaps to bridge downtime.

Rising Role of Used Serviceable Material (USM) - OEMs are focusing on LEAP/GTF production, so CFM56 operators

will lean heavily on USM and part harvesting to control costs.

Expect more part-outs of older A320ceo/737NG fleets to feed the USM pipeline.

Freighter Conversions Sustaining Demand - The surge in 737-800BCF conversions is extending -7B engine utilization.

Cargo growth will keep a meaningful chunk of the CFM56 fleet in operation into the mid-2030s, ensuring steady demand for overhauls.

Leased Engine Scarcity -Spare CFM56 lease pools are tight and expensive, and will remain so as airlines hang onto engines longer. This scarcity

will force airlines to optimize shop-visit planning and rely more on "green-time" engines.

MRO Network Consolidation and Expansion - OEM partners (GE/Safran) are expanding capacity to clear backlogs, while independents look to capture the last big wave of CFM56 business.

Some independents may pivot to hybrid strategies (finishing CFM56 while preparing for LEAP).

Digital & Predictive Maintenance - Operators are adopting predictive analytics and engine health monitoring to squeeze maximum life out of CFM56 assets. This helps defer overhauls until absolutely necessary, a growing priority with tight shop capacity.

- \* Development of repairs on Leap will be key for the MRO performance and a competitive advantage for those who will develop and industrialize those parts repair; OEMs needing more capacity on repairs,
- \* Development of the "premier MRO" network to bring alternative solutions to the OEMs and improve the cost of ownership of the Leap product on the long term by encouraging competition