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MRO 360°

Final Destination

End-of-Life Management for Commercial Aircraft

Engineering the Future
The KUNZ Approach

Wheels and Brakes Solutions
AMETEK MRO and Werner Aero Interview

Maintenance Mythbusters
OEM Parts Are the Only Safe Option

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Dear Industry Colleagues,

This month's principal focus is on end-of-life management for aircraft – "To be broken down or not to broken down, that is the question," though we have sought answers to several more questions and challenges MROs face during a time of supply chain uncertainty.

Our second feature article focuses on wheels and brakes. When you consider the extreme thermal, mechanical and environmental stresses these are subjected to each time an aircraft lands, it is little wonder that considerable attention needs to be paid to them on an ongoing basis. Our thanks go to AMETEK MRO and Werner Aero for their time as we interview them to get their take on wheels and brakes solutions.

Continuing our series, this month's 'Mythbusters' relates to "OEM Parts Are the Only Safe Option" and does such a myth do little other than exacerbate already badly disrupted supply chains? We are sure you probably have your own opinions on this subject.

Our last article is on what we refer to as the 'Internal Sheriff' or the quality control department in any aircraft maintenance set-up where safety, compliance, and reliability are paramount.

As always, I hope you enjoy this latest edition of our magazine.

Torsten Tamm
Publisher

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End-of-Life Management for Commercial Aircraft

Trelleborg opens aerospace facility in Casablanca

The new production facility in Casablanca, Morocco © *Trelleborg*

Trelleborg Sealing Solutions Aerospace (Trelleborg) has opened a new 5,000 m² production facility in Casablanca, Morocco, strengthening its capacity to support growing global demand in the aerospace sector. Located in the Midparc Industrial Freezone near Mohammed V International Airport, the site provides a local manufacturing presence for customers while increasing the company's global production capabilities. The investment is expected to create 150 to 200 skilled jobs and further enhance Morocco's position within the global aerospace supply chain. Gordon Roper, President of Trelleborg's Global Aerospace business, said Casablanca has become a major aerospace hub and noted that Trelleborg is the first company in Morocco to manufacture polymer seals for aerospace applications. He highlighted the country's growing role in the global aerospace value chain and the strategic importance of locating within Casablanca's established aerospace ecosystem. The facility also includes an advanced materials laboratory to support testing and development for Trelleborg's global aerospace operations. To develop local talent, the company will partner with the Moroccan Aerospace Training Center (IMA) to provide specialised training and create a pipeline of qualified employees. Trelleborg said the majority of management positions will eventually be held by Moroccan nationals, underlining its long-term commitment to the country.

Crestone completes Arena acquisition

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Crestone Air Partners (Crestone), the global aviation asset management platform majority owned by Air T, has completed its acquisition of Arena Aviation Capital (Arena), following the fulfilment of all customary closing conditions and regulatory approvals. The deal, first announced in March 2026, significantly expands Crestone's scale and capabilities. The combined business now manages more than US$4 billion in assets, with a portfolio of approximately 120 aircraft and 17 engines leased to airlines and operators worldwide. The enlarged organisation employs 55 professionals across five countries, strengthening Crestone's position as a leading full-service aviation asset manager. Headquartered in Denver, the company now benefits from an expanded global footprint and broader operational reach. Arena Aviation Capital brings a highly experienced team, a complementary portfolio and long-standing airline relationships that align closely with Crestone's aircraft lifecycle investment strategy. Arena's presence in Denver, Amsterdam and Dublin, alongside satellite offices in Singapore and Buenos Aires, further enhances the company's ability to support customers across key aviation markets. The transaction also includes a passive minority equity investment from funds managed by Blue Owl Capital (Blue Owl). The investment is expected to complement Blue Owl's growing aircraft acquisition programme with Crestone and support future growth opportunities. Crestone will continue to be led by Chairman and Chief Executive Officer Kevin Milligan. As part of the integration, Arena Chief Executive Officer Patrick den Elzen will join Crestone's board of directors. Arena Chief Commercial Officer Erik Dahmen will remain with the business as a full-time Senior Advisor and will also join Crestone's advisory board.

AJW Technique secures SACAA approval

© AJW Technique

AJW Technique, the MRO division of AJW Group, has received Approved Maintenance Organisation (AMO) certification from the South African Civil Aviation Authority (SACAA), strengthening its ability to support operators across the region. The approval authorises AJW Technique to carry out maintenance on civilian aeronautical components regulated by SACAA. Issued under AMO Approval No. 1695, the certification covers Category B and X ratings, including airframe, engine, avionics and electrical components. The achievement marks the latest addition to AJW Technique's growing portfolio of international regulatory approvals. Based in Montreal, the MRO facility continues to expand its global reach through region-specific certifications that enable it to support customers across a wide range of aviation markets. The SACAA approval is expected to enhance service capabilities for South African operators by improving supply chain efficiency, streamlining maintenance support and helping airlines consolidate vendor relationships. With certifications and approvals from Transport Canada Civil Aviation (TCCA), the US Federal Aviation Administration (FAA), the European Union Aviation Safety Agency (EASA), the UK Civil Aviation Authority (CAA), the Civil Aviation Administration of China (CAAC), the Civil Aviation Authority of Nepal (CAAN), the Civil Aviation Authority of Singapore (CAAS), Brazil's ANAC, the Hong Kong Civil Aviation Department (HKCAD), the Japan Civil Aviation Bureau (JCAB) and now SACAA, AJW Technique is well placed to meet the regulatory requirements of airlines operating worldwide.

SkySelect and Armac target MRO procurement gap

SkySelect and Armac Systems unite to give aviation end-to-end supply chain control © *SkySelect*

SkySelect, an AI-powered parts procurement platform, has announced a strategic partnership with Armac Systems, a specialist in aviation inventory optimisation. The collaboration is designed to tackle one of aviation MRO's most persistent supply chain challenges: connecting inventory planning with procurement execution. It aims to help operators and MRO providers understand not only what to buy, but also where, when, at what price and in what quantity. Aviation operators and maintenance providers are under growing pressure to reduce working capital tied up in inventory, cut procurement costs and maintain the service levels needed to keep aircraft operational. Achieving all three has often meant relying on fragmented systems, manual processes and limited market visibility. The partnership brings together Armac's demand intelligence with SkySelect's procurement execution capabilities. Armac's platform supports real-time forecasting, inventory planning, optimisation and purchase requirement generation. SkySelect then converts those demand signals into procurement action through procure-to-pay workflows, dynamic contracting and market insights across a global supplier network. Together, the companies say the integrated solution can deliver measurable gains in three key areas. First, it can improve working capital by right-sizing inventory and reducing stock that ties up cash. Shorter lead times can also reduce safety stock requirements. Second, it can lower spend by using market-driven sourcing and autonomous procurement to secure better pricing, lead times and logistics options, while automating the procurement process. Third, it can improve service levels by ensuring the right part is available at the right time. Faster lead and process times can also reduce aircraft-on-ground risk. Erkki Brakmann, CEO of SkySelect, said Armac has built a planning engine trusted by airlines and MROs. By combining Armac's predictive intelligence with SkySelect's market access and autonomous procurement, he said the companies are closing the loop on end-to-end optimisation. Micheál Armstrong, CEO of Armac Systems, said customers have long asked for a seamless link between Armac's inventory recommendations and procurement execution. He described SkySelect as the ideal partner to turn optimisation outputs into real-world results.

New investment powers TXG expansion

The Xtreme Group (TXG), a Miami-based aviation MRO provider, has secured a growth investment from private equity firm Heartwood Partners to support the next phase of its expansion. The funding is expected to strengthen the company's operational capabilities, increase capacity and broaden its geographical reach, while enabling further development of its service offering. Founded in 2013, TXG has established itself as a leading independent aviation MRO platform, providing a comprehensive range of services across the aircraft lifecycle. Its capabilities include airframe heavy maintenance, engine MRO, line maintenance, aircraft-on-ground (AOG) support and component distribution. The company serves a diverse customer base spanning cargo, commercial and charter operators. TXG operates line maintenance stations at major airports across the United States, positioning the business to support operators in key aviation markets. The company has built a reputation for delivering reliable maintenance services focused on operational efficiency, safety and customer satisfaction. As part of the transaction, TXG's existing leadership team will remain in place. Chief Executive Officer Carlos Cock will continue to lead the company and oversee the execution of its long-term growth strategy. Maintaining management continuity is expected to support ongoing customer relationships while driving expansion initiatives.

BeauTech expands credit facility to US$1.40bn

BeauTech Power Systems (BeauTech) has amended and extended its revolving credit facility, raising total commitments from US$0.63 billion to US$1.40 billion and pushing maturity out to June 2031. The aircraft engine leasing, asset management and trading specialist said the amended facility was almost twice oversubscribed, underlining strong backing from existing lenders and new banking partners. The new agreement more than doubles Beau Tech's revolving credit capacity. It also delivers better pricing, greater operating flexibility and a broader asset base for financing. The facility now covers wide-body assets, in addition to the company's established regional and narrow-body platforms. U.S. Bank acted as Administrative Agent, Joint Lead Arranger and Joint Bookrunner. Bank of America, Truist Bank and PNC Bank served as Co-Syndication Agents, Joint Lead Arrangers and Joint Bookrunners. Crédit Agricole Corporate and Investment Bank, MUFG Bank, Huntington Bank and BMO Bank also acted as Joint Lead Arrangers and Joint Bookrunners, while Fifth Third Bank served as Documentation Agent.

Collins boosts Asia-Pacific MRO capacity

Collins Aerospace's new Subang MRO facility targets rising demand © *Collins Aerospace*

Collins Aerospace has completed a major expansion of its MRO facility at Subang Aerotech Park in Malaysia, investing US$63 million to establish the site as its principal regional hub for advanced component support. The project increases the company's MRO footprint in Selangor from 46,000 ft² to 164,000 ft², more than tripling the facility's size. The transition to the new site is expected to be completed by the end of the year. "The Asia-Pacific region is a key growth market for the industry, and this investment ensures that we grow alongside our customers," said Irene Makris, President of Power & Controls at Collins Aerospace. "Malaysia offers the right environment for us to scale, and we are planning to double employment opportunities for skilled talent in the region to keep pace with growing demand. The Subang expansion optimises operations and regional support for our customers, providing faster turnaround times and more efficient service." The expansion comes as demand for MRO services across the Asia-Pacific region continues to rise, driven by a fleet that is forecast to double over the next two decades. The upgraded facility will provide advanced MRO support for a range of aircraft components, including air cycle machines, heat exchangers, valves and next-generation starters. Subang will also introduce a range of digital technologies designed to improve productivity and reduce turnaround times. These include digital tier boards, eAndon systems, autonomous mobile robots and real-time location tracking technology. Designed with long-term resilience in mind, the facility incorporates a smart building management system that monitors and optimises energy and resource consumption. Integrated safety systems, scalable infrastructure and newly installed equipment featuring improved ergonomics and lower environmental impact are also aimed at supporting future growth and operational efficiency.

Mubea Aviation wins A350 composite contract from Airbus

© Mubea Aviation has secured a composite contract with Airbus Atlantic

Mubea Aviation has secured a contract from Airbus Atlantic for the serial production and supply of CFRP composite structural components for the Airbus A350 programme. The award underscores Mubea Aviation's expertise in advanced composite technologies and its ability to deliver lightweight, efficient and reliable structural solutions for the aerospace sector. It also marks a further step in strengthening the company's position as a trusted supplier within the Airbus supply chain. The project was formally launched during a kick-off meeting at Mubea Aviation's facility in Ergene, Türkiye, bringing together the full cross-functional team. The company said the event highlighted the collaboration and commitment that will support the programme's success.

Nasmyth reaches key Rolls-Royce milestone with Sri City launch

Nasmyth Group (Nasmyth) has reached a major milestone in delivering its previously announced Rolls-Royce contract. The company has established its new facility in Sri City, completed the installation of equipment, built its workforce, and successfully passed its AS9100D quality management system audits in May 2026. The achievement marks a pivotal stage in Nasmyth's global aerospace growth. The purpose-built facility, now fully operational and AS9100D certified, fulfils key commitments to one of the world's leading aerospace OEMs and positions the company at the centre of critical international engineering programmes. Nasmyth Group, together with parent company Sigma Advanced Systems Ltd, will supply a broad range of high-precision, safety-critical components and assemblies for Rolls-Royce aerospace programmes through its expanding manufacturing investments in the UK and India. The partnership builds on an established relationship and reflects continued confidence in Nasmyth's ability to operate as a globally integrated manufacturing platform. Through its UK-India operating model, the company combines local expertise with global capability to support the aerospace sector. As Nasmyth continues to expand its international presence, investments such as Sri City underline a wider strategic shift. Backed by Sigma Advanced Systems, the Group is moving further into the core of the aerospace supply chain, taking on larger and more complex programme responsibilities that demand both scale and engineering excellence.

ATC expands MRO footprint with ACI acquisition

Air Transport Components (ATC) has strengthened its MRO capabilities through the acquisition of Aero Controls (ACI), an FAA-certified specialist in precision-engineered aircraft component repairs. Based in Seattle and operating from three locations, ACI has supported the commercial aviation sector for more than four decades. The acquisition expands ATC Group's geographic presence in the Pacific Northwest while adding specialist engineering expertise and proprietary repair capabilities to its growing platform. ACI's services cover a range of highly technical aircraft systems, including avionics, electromechanical components, pneumatics, transmissions, hydraulics and emergency equipment. The company will continue operating as a business unit within ATC Group, with its existing management team remaining in place to support continuity and future growth. ATC said the deal enhances its ability to offer comprehensive component MRO services to airline customers while creating new opportunities to cross-sell services across the combined customer base. Chief Executive Jimmy Newman described ACI's engineering expertise and industry relationships as a strong complement to ATC's existing capabilities, adding that the acquisition strengthens the company's position as a one-stop shop for major airlines. ACI Founder John Titus said joining ATC Group would accelerate growth opportunities while enabling the business to continue delivering high-quality repair solutions to customers. The transaction marks ATC Group's second acquisition since partnering with private equity firm AE Industrial Partners in June 2025, following the earlier acquisition of PAS MRO. AE Industrial Partners said the deal supports its strategy of building a leading component MRO platform with broader capabilities, expanded market reach and a stronger customer offering.

Bain Capital to acquire majority stake in FDH Aero

FDH Aero has signed a definitive agreement under which Bain Capital will acquire a majority stake in the company
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FDH Aero, a global provider of supply chain solutions for the aerospace and defence sector, has signed a definitive agreement under which Bain Capital Private Equity (Bain Capital) will acquire a majority stake in the company. Audax Private Equity, which has been FDH's majority shareholder since 2017, is expected to remain a significant investor following completion of the transaction.

The investment is designed to support FDH's next phase of expansion through continued investment in its capabilities, service offering and international footprint. Growth plans will combine organic development with targeted acquisitions. The company will continue to be led by Chief Executive Officer Ian Walsh and its existing management team. FDH Aero provides supply chain support to aerospace and defence manufacturers and aftermarket customers, specialising in hardware, electrical products, consumables and expendables. With more than six decades of industry experience, the company has built a reputation for reliability, inventory availability and customer service.

Today, FDH operates a global network employing more than 1,500 people across 15 countries. Since Audax first invested in 2017, FDH has expanded its presence across five continents and completed 12 acquisitions, broadening both its product portfolio and market reach. The company has also delivered substantial revenue growth during that period. With Bain Capital now joining as the majority investor, FDH expects to build on that momentum, further expanding its global platform and enhancing support for customers operating in increasingly complex aerospace and defence supply chains.

AerFin strengthens worldwide A320neo support

AerFin has reached a significant milestone in its A320neo programme, surpassing 9,000 removed components following the teardown of eight aircraft in France and the Philippines. The high-demand material has now been strategically positioned across the company's global warehousing network to support customers throughout EMEA, APAC and the Americas. The achievement marks the next stage in the programme's development, reflecting its growing scale and maturity. Inventory is already available in Newport, Gatwick, Singapore and Miami, enabling operators, lessors and asset owners to access quality-assured components closer to their operations. AerFin's global distribution strategy is focused on delivering material quickly, reliably and efficiently. Each A320neo teardown has generated between 1,200 and 1,400 serviceable components, including a range of major assets now available for sale or exchange. Alongside structural assemblies, nacelles, APUs and landing gear, demand remains strong for rotables and consumables across the network. By positioning inventory in multiple regions, AerFin is helping customers reduce lead times, improve parts availability and maintain operational continuity. The programme continues to gather momentum, with additional A320neo aircraft now entering onboarding and disassembly. These acquisitions will further strengthen AerFin's inventory pipeline and expand the availability of sought-after material. The company is also offering a growing portfolio of fresh-from-shop PW1000 GTF engines for lease or sale, providing airlines and asset owners with flexible engine solutions. To further enhance regional support, AerFin continues to invest in its global infrastructure, including its partnership with B&H Worldwide in Singapore and expanding inventory availability in Miami. Every component is backed by the company's technical expertise and rigorous quality assurance processes, helping customers minimise downtime, manage costs and maintain fleet reliability. With additional material continuing to enter stock, AerFin's A320neo inventory is positioned to support both immediate operational needs and long-term fleet strategies.

AerFin has surpassed 9,000 removed components following the teardown of eight A320neos in France and the Philippines © *AerFin*

Aer Lingus adopts AISmartPlan maintenance platform

Aer Lingus and AISmartPlan have signed a new commercial agreement © *IAG*

International Airlines Group (IAG) has reported a new commercial agreement between Aer Lingus and AISmartPlan, an AI-powered aircraft maintenance planning platform, following a successful collaboration through the IAGi Accelerator programme. AISmartPlan joined IAG's flagship accelerator in 2025, working alongside Aer Lingus to trial its technology in a live airline environment. The platform replaces traditional manual maintenance production planning with an intelligent, automated system that consolidates key operational data, including flight schedules, aircraft availability and workforce constraints, to create optimised maintenance plans. By automatically assigning the right engineers to the right aircraft at the right time, the platform helps streamline planning processes. Its intuitive drag-and-drop visualisation tools also allow teams to quickly understand, adjust and manage maintenance schedules. Within just three months, AISmartPlan evolved its technology from a proof of concept into a fully functioning solution. The platform is now being deployed within Aer Lingus' maintenance production planning operations. Throughout the accelerator programme, Aer Lingus teams worked closely with the start-up to refine the platform's visual planning capabilities, automation features and user experience. The collaboration resulted in a solution specifically tailored to the requirements of aviation maintenance operations. Following the successful trial, AISmartPlan has signed a multi-year commercial agreement with Aer Lingus, with the potential for future deployment across other airlines within the IAG group. "Our goal has always been to fully automate maintenance planning and make complex plans instantly visible and actionable," said Nicolas Grondin, Founder of AISmartPlan. "The IAGi Accelerator gave us an incredible opportunity that early-stage companies rarely receive – direct operational engagement with an airline willing to test, challenge and co-create the solution with us. Aer Lingus' feedback directly shaped the product and validated its suitability for the aviation market."

GA Telesis expands GE90 repair capability

GA Telesis has completed a major upgrade to its fuel pump test bench infrastructure, extending its component repair capability to cover full overhaul, testing and certification of GE90 jet engine fuel pumps. The investment strengthens the company's aviation maintenance, repair and overhaul offering, adding upgraded test equipment, broader performance-validation capacity and advanced testing procedures. These enhancements are designed to meet the demanding operating requirements of GE90 engine fuel systems. The improved platform enables GA Telesis to provide end-to-end support for fuel pumps used on one of the world's key widebody engine programmes. It also gives airlines and engine MRO providers access to an independent repair option focused on quality, responsiveness and cost control. Pastor Lopez, President of GA Telesis' MRO Services Group, said the investment underlines the company's commitment to deepening its technical expertise and supporting customers with reliable component repair services. He added that the new GE90 fuel pump overhaul and testing capability further reinforces GA Telesis' position as a leading independent MRO provider. The enhanced test bench can verify performance across the full operating range of the GE90 engine fuel pump, ensuring compliance with OEM specifications and industry standards. Customers are expected to benefit from shorter turnaround times, improved component reliability, lower operational risk and access to GA Telesis' established technical expertise.

GA Telesis has expanded its component repair capabilities with new GE90 fuel pump overhaul and testing capacity *© GE Aerospace*

Global Airtech secures BBN Thailand deal

Global Airtech will support operations across BBN Airlines Thailand's A320 fleet *© BBN Airlines Thailand*

Global Airtech has signed a five-year component availability agreement with BBN Airlines Thailand to support operations across its A320 fleet. The agreement covers the leasing of fast-moving and mission-critical airframe and engine components, strategically positioned at BBN Thailand's facilities in Bangkok. Inventory replenishment will be supported through Global Airtech's regional pool in Singapore, while repairs will be managed via its established network of regional repair partners. The arrangement enables Global Airtech to leverage its extensive A320 inventory holdings and regional repair capabilities, delivering faster turnaround times and improved component availability to support operational reliability. "Global Airtech was selected based on its strong market reputation in supporting critical material requirements, which was a key consideration for BBN Thailand given the high stability demands of our ACMI operations. Reliable component availability is essential to maintaining operational performance and fulfilling our service commitments," said Apirak Homlaor, CEO of BBN Thailand.

Sopra Steria eyes aerospace expansion

Sopra Steria has entered into exclusive negotiations to acquire the Manufacturing Engineering business of Daher Industrial Services (Daher) in a move designed to strengthen its aerospace engineering capabilities and deepen its position within the European aviation sector. The proposed acquisition would significantly expand Sopra Steria's expertise in manufacturing engineering, particularly in the aerospace industry, where demand for greater production efficiency and industrial performance continues to grow. Daher Industrial Services' Manufacturing Engineering division specialises in two key stages of the aerospace manufacturing process: the preparatory pre-production phase and operational support aimed at increasing production rates and improving manufacturing efficiency. The business also provides services focused on quality assurance, industrial performance and continuity across manufacturing operations. With more than 360 employees, the majority based in France, the division generated revenue exceeding €42 million in 2025. Airbus represents its principal customer, with the partnership between the companies dating back to 1995. For Sopra Steria, the deal would represent a major step forward in expanding its role across the aerospace value chain. The company said the acquisition aligns with its wider strategy of developing end-to-end expertise capable of supporting increasingly complex aerospace manufacturing programmes. The move comes at a time when aircraft manufacturers are under pressure to accelerate production while simultaneously meeting stricter industrial and operational standards. By integrating Daher Industrial Services' manufacturing engineering capabilities, Sopra Steria aims to strengthen its ability to support major aerospace groups, including Airbus, across a broader range of industrial activities. The acquisition would also reinforce Sopra Steria's ambition to position itself as a leading technology and industrial partner for Europe's major aerospace programmes, particularly as the sector continues to modernise and scale production capacity. The proposed transaction remains subject to consultations with employee representative bodies and the usual regulatory approvals. Completion of the acquisition is expected during the second half of the year.

Sopra Steria has entered into negotiations with a view to acquire the Manufacturing Engineering business from Daher Industrial Services *© Daher*

SIAEC and Safran Aircraft Engines launch joint venture

The joint venture between SIAEC and Safran Aircraft Engines will support LEAP-1A and LEAP-1B engines *© CFM International*

SIA Engineering Company (SIAEC) and Safran Aircraft Engines (SAE) have signed a joint venture agreement to establish a dedicated CFM LEAP engine MRO facility in Singapore. The new venture will support LEAP-1A and LEAP-1B engines, marking a significant milestone in the partnership following the letter of intent signed in November 2025 to strengthen LEAP engine maintenance capabilities in the region. Under the agreement, Safran Aircraft Engines will hold a 51% stake in the joint venture, while SIAEC will own the remaining 49%. The partnership builds on the companies' existing collaboration, which began in 2019 with a LEAP engine maintenance services agreement. SIAEC currently carries out LEAP engine Quick Turn maintenance for SAE at its Aircraft Engine Services facility in Changi North. These operations will be transferred into the new joint venture, creating the foundation for a state-of-the-art engine MRO facility. The planned expansion will increase engine shop visit capacity and provide a broader range of services for LEAP-1A and LEAP-1B engines, supporting the growing global fleet powered by LEAP engines. SIAEC Chief Commercial Officer Wong Yue Jeen said the venture combines Safran's original equipment manufacturer expertise with SIAEC's established MRO capabilities. He noted that the partnership will strengthen the global LEAP maintenance network while enhancing SIAEC's expertise in servicing next-generation engines to meet rising worldwide demand. Nicolas Potier, Executive Vice President of Support & Services at Safran Aircraft Engines, described the agreement as an important step in expanding the company's global MRO ecosystem. He said the new facility will help address increasing demand for LEAP engine maintenance across the Asia-Pacific region by bringing together the strengths of both organisations. The joint venture is expected to provide airlines with high-quality maintenance support, improved operational reliability and greater access to specialised LEAP engine services as the market for next-generation aircraft engines continues to expand.

South Korean airline SUM Air to implement AMOS

South Korean start-up carrier SUM Air has gone live with the AMOS maintenance and engineering platform from Swiss AviationSoftware (Swiss-AS), creating a scalable digital foundation ahead of its first aircraft delivery. The move makes SUM Air the fourth South Korean airline to adopt AMOS, using the integrated system to streamline maintenance operations, improve efficiency and support long-term expansion. The platform provides full oversight of maintenance planning, real-time execution tracking and regulatory compliance, helping the airline scale operations without added complexity. SUM Air has also introduced AMOSmobile/EXEC and AMOSmobile/STORES, enabling mechanics and store personnel to manage tasks, inventory and maintenance records through mobile devices in a fully paperless workflow. The digital tools are designed to reduce turnaround times, eliminate paperwork and support faster operational decision-making. The airline currently operates a single ATR 72 on domestic services and plans to expand internationally. AMOS will serve as the operational backbone for future fleet and network growth.

SUM Air is the fourth South Korean airline to implement AMOS *© SWISS-AS*

SSAMC becomes China's first CFM LEAP MRO provider

LEAP engine at SSAMC facility *© CFM International*

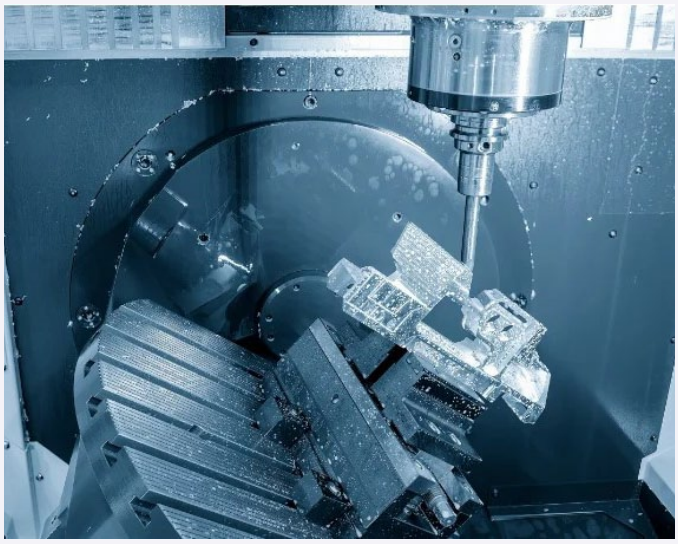
CFM International (CFM) and Sichuan Services Aero-engine Maintenance Company (SSAMC), the joint venture between Air China and CFM, have confirmed that SSAMC will join the network of Premier MRO providers for CFM LEAP engines. The announcement was made during a ceremony at MRO Greater China, where the company outlined plans to deliver maintenance, repair and overhaul support for the LEAP engine family. "As a shareholder and major customer of SSAMC, Air China highly values this milestone. SSAMC's admission into the CFM LEAP Premier MRO ecosystem elevates our long-standing partnership with CFM to a new level and strengthens support for our fleet—especially the growing C919 fleet," expressed Jiliang Ni, Senior Vice President at Air China Limited. "With strong shareholder backing, SSAMC is positioning itself for even greater success ahead." The designation marks SSAMC as China's first Premier MRO provider for CFM LEAP engines and the first facility authorised to maintain LEAP-1C engines powering the COMAC C919. In addition, the site will be certified to service LEAP-1A and LEAP-1B engines used on Airbus A320neo family aircraft and Boeing 737 MAX jets. "Air China is the only airline in the world to have operated six generations of CFM engines and established an engine maintenance shop with us," added Weiming Xiang, president of CFM Greater China and GE Aerospace Greater China. "This agreement builds on that rich history together." SSAMC was established in Chengdu in 1999 and has serviced more than 2,800 CFM engines, including both CFM56 and LEAP engines for Boeing 737 and Airbus A320 family operators.

Vietjet and Thailand partner on U-Tapao MRO hub

The agreement was signed during Vietnamese leader To Lam's (far left) official visit to Thailand, in the presence of senior leaders from both countries © *Vietjet*

Vietjet Air (Vietjet) and the Eastern Economic Corridor Office (EECO) of Thailand have signed an agreement to develop an aircraft maintenance, repair and overhaul (MRO) centre at U-Tapao International Airport. The signing took place during Vietnamese leader To Lam's official visit to Thailand, in the presence of senior leaders from both countries. The new facility will support Vietjet's operations by enhancing technical capabilities, improving fleet readiness and reducing aircraft maintenance turnaround times. The project will also encourage investment in aviation infrastructure, technology transfer, workforce training and stronger regional air connectivity. The partnership aligns with Thailand's strategy to develop its aviation sector as a driver of economic growth, tourism and regional integration. Located within Thailand's Eastern Economic Corridor (EEC), U-Tapao is being transformed into a major aviation and logistics hub, combining aircraft engineering, maintenance and high-tech services. The project represents a significant step forward in Vietnam–Thailand economic cooperation and reinforces Vietjet's growing role in the regional aviation supply chain. Thailand remains a key market for Vietjet through Vietjet Thailand, which employs nearly 1,500 staff and operates 22 aircraft. Vietjet Group has also committed to transferring 50 Boeing 737-8 aircraft to the airline, supporting further growth in Thailand and the wider region. Since launch, Vietjet Thailand has carried 50 million passengers, helping to boost tourism, trade and connectivity across ASEAN and the Asia-Pacific region.

DSC Trading launches new partnership with Skyways Technics



DSC Trading and Skyways Technics sign parts agreement © *Shutterstock*

DSC Trading has inked a new consignment partnership with Skyways Technics, a global provider of regional and commercial aircraft support services. Under the agreement, DSC Trading has received a broad inventory of expendable components supporting a range of aircraft types, including the Boeing 737, Airbus A320, ATR 42/72, CRJ 100/200/900 and Embraer ERJ 135/145. Skyways Technics has developed a strong international presence over the past 35 years, providing tailored maintenance and repair solutions to aircraft operators and owners worldwide. The company supports customers through an extensive network that includes base maintenance operations, spare parts support and workshop facilities in Europe, as well as workshops in Asia and sales offices across the Middle East and the United States. The new consignment partnership further enhances DSC Trading's ability to provide expanded inventory support and responsive material solutions to airlines, MRO providers and repair facilities across the global commercial and regional aviation sectors. The agreement also marks another step in the company's long-term growth strategy, strengthening its commitment to delivering reliable aviation support services through increased inventory availability across several of the industry's most widely operated aircraft platforms. DSC Trading is a US-based aircraft parts supplier headquartered in St Johns, Florida, specialising in certified expendable, consumable and rotable components for Boeing and Airbus fleets. Founded in 2002, the company supports more than 1,800 airlines, MRO providers and repair stations worldwide from a 50,000 ft^2 facility holding over 11 million parts in stock."

SIAEC opens new Base Maintenance Malaysia (BMM) in Subang

SIA Engineering Company (SIAEC) officially opened Base Maintenance Malaysia (BMM) on May 22, its wholly owned base maintenance facility at Sultan Abdul Aziz Shah Airport, Subang. BMM forms part of SIAEC's regional base maintenance network, adding capacity to support its existing hangar operations in Singapore and the Philippines. The facility will provide maintenance, repair and overhaul (MRO) services for both wide-body and narrow-body aircraft, including current- and next-generation fleets operating across Asia-Pacific and beyond. The two-hangar facility can accommodate up to six aircraft undergoing concurrent checks, strengthening SIAEC's operational resilience while offering customers greater flexibility in meeting their MRO requirements. The launch of BMM also underscores SIAEC's confidence in Malaysia as a key aerospace hub. Malaysia offers a strong aviation heritage, strategic geographic position, established infrastructure, and an expanding pool of skilled aerospace talent. Subang, in particular, continues to play an important role in the country's aviation and aerospace ecosystem. BMM secured the necessary regulatory approvals for the first of its two hangars and completed its first Airbus A350 aircraft check in November 2025. The successful completion of aircraft checks for Singapore Airlines marked significant milestones in demonstrating the facility's operational readiness and technical capabilities.

Asia Digital Engineering secures US$100m expansion funding

ADE has secured US$100m financing from QNB Group © *Shutterstock*

Asia Digital Engineering (ADE), the MRO arm of Capital A, has secured a US$100 million financing facility from QNB Group to support its continued expansion and capacity growth. The funding will help ADE strengthen its position as one of Asia's fastest-growing MRO providers, enabling it to scale operations, serve a growing portfolio of airline customers and continue supporting anchor customer AirAsia Group. Asia Digital Engineering Chief Executive Mahesh Kumar said the financing reflects confidence in the company's financial performance, operational discipline and growth strategy. He noted that ADE has completed more than 300 C-checks in five years and said the investment would boost capacity and support rising demand for efficient, high-quality maintenance services. Capital A CEO Tony Fernandes described the deal as a milestone for ADE, highlighting its evolution from AirAsia's in-house engineering unit into a rapidly expanding aviation services business serving global airlines, including Air France. He said the financing positions the company to become a major regional player in the MRO sector.

TAT secures US$45m in new MRO deals

© TAT Technologies

TAT Technologies (TAT) has secured several new long-term MRO agreements with international passenger and cargo airlines, representing an estimated combined value of approximately US$45 million. The contracts span periods of five to ten years. The newly awarded agreements cover support for auxiliary power unit (APU) platforms under TAT's OEM authorisation, as well as MRO services for heat exchangers. The company believes the contracts further strengthen its position in the global commercial aviation aftermarket and reflect sustained demand for its APU and thermal management capabilities. TAT also announced the sale of its minority interest in an unconsolidated entity. As a result of the transaction, the company expects to record a one-off pre-tax gain of approximately US$4 million in the second quarter of 2026. "These new long-term contracts mark another important milestone in our global sales efforts," said Igal Zamir, President and Chief Executive Officer of TAT Technologies. "We continue to see strong demand across our MRO operations, supported by healthy order activity and growing engagement from both existing and new airline customers worldwide. These agreements enhance our revenue visibility and order backlog while expanding our presence across key international airline programmes. We believe the continued momentum across the business positions TAT to deliver revenue growth and EBITDA expansion throughout 2026 and beyond."

3TOP targets regional jet aftermarket with E190 acquisition

3TOP has acquired two former Alitalia-operated E190 aircraft © *Shutterstock*

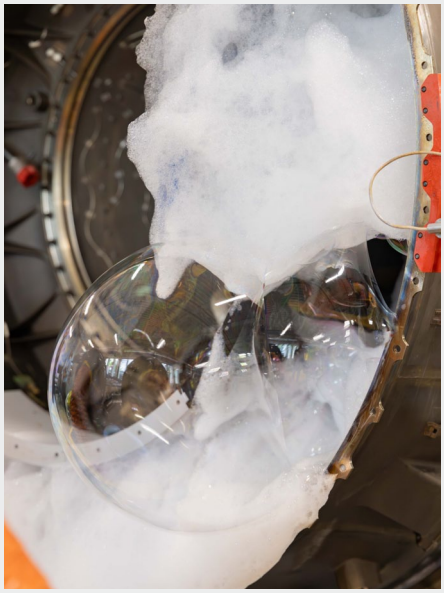
3TOP Aviation Services (3TOP) has acquired two Embraer E190-100 regional aircraft as part of a strategic move into the growing regional jet aftermarket sector. The aircraft, bearing MSNs 19000470 and 19000479, were previously operated by Alitalia. The acquisition marks a diversification of 3TOP's portfolio and strengthens its position within the global aviation supply chain. The aircraft will be utilised to support continued international demand for high-quality engine and airframe components, particularly as operators continue to face supply chain and maintenance challenges. "The Embraer E190 platform continues to demonstrate strong relevance across the regional aviation market, particularly as operators seek dependable support solutions amid ongoing supply chain constraints," said Paul Dsilva, VP Operations & Technical at 3TOP. He added that the acquisition aligns with the company's strategy of investing in assets offering strong teardown value, component liquidity and immediate aftermarket demand. Expanding into the E-Jet platform will also enhance 3TOP's ability to provide responsive inventory support across both engine and airframe materials.

FTAI Aviation prices inaugural ABS deal

FTAI Aviation has announced the successful pricing of the inaugural asset-backed securitisation (ABS) issued by its Strategic Capital vehicle, FTAI MRE 2026-1. The offering comprises US$612 million in notes backed by a portfolio of 48 A320ceo and Boeing 737NG aircraft leased to 23 airlines worldwide. FTAI MRE 2026-1 will issue two classes of investment-grade notes, with the Series A notes expected to receive ratings of Asf / A(sf) from Fitch and KBRA respectively, while the Series B notes are expected to be rated BBB+sf by Fitch. The transaction is expected to close on June 4, 2026. The aircraft supporting the ABS are owned by FTAI's first Strategic Capital vehicle, which completed fundraising in October 2025 with US$2.0 billion in equity commitments and currently owns 292 aircraft. According to the company, the transaction attracted strong investor demand, with both classes of notes significantly oversubscribed.

"This inaugural securitisation marks an important milestone for FTAI and our Strategic Capital vehicles as we diversify our funding sources and strengthen our presence in the capital markets," said Kallie Steffes, Head of Strategic Capital at FTAI. "We believe the strong investor interest reflects confidence in our differentiated investment approach within the narrow-body aircraft sector, combining FTAI's leading engine maintenance capabilities with aircraft ownership. We are grateful to the teams at ATLAS SP Partners and Deutsche Bank for their partnership from the launch of our initial warehouse through to this ABS issuance." ATLAS SP Partners and Deutsche Bank acted as joint structuring agents and joint lead bookrunners for the transaction. BNP Paribas, Citigroup and PNC Capital Markets served as joint bookrunners, while Standard Chartered Bank and KeyBanc Capital Markets acted as co-managers.

GE Aerospace deploys 360 Foam Wash cleaning system to MRO shops



360 Foam Wash jet engine cleaning technology is being deployed to MRO shops globally © *GE Aerospace*

GE Aerospace has announced the global rollout of its 360 Foam Wash jet engine cleaning technology across maintenance, repair and overhaul facilities. The foam wash system is designed as an alternative to traditional water wash methods, using a specially formulated proprietary cleaning solution to remove dust and dirt from engines. The process helps lower exhaust temperatures, improve compressor efficiency and restore engine performance. Engines entering GE Aerospace or partner overhaul shops are now cleaned using foam wash before inspection, enabling clearer inspection imagery, reducing rework and supporting faster turnaround times for customers. GE Aerospace said the expansion of the technology across its overhaul network forms part of wider efforts to improve engine durability and fleet availability. The foam wash system has been approved for use on several GE Aerospace engine programmes, including variants of the GE90, GEnx and CF34. It has already been fully adopted for all GEnx engines operated in the Middle East. When used for on-wing maintenance, the cleaning system can also improve fuel efficiency and extend time on wing. Since testing began in 2017, more than 6,500 foam washes have been completed on in-service engines worldwide. Most have been carried out by airline customers that have integrated the process into their maintenance programmes. More than ten airlines have so far received technical licences to use the technology on GE90, GEnx and CF34 engines.

Liebherr and Loong Air sign maintenance agreement for heat transfer equipment

Liebherr-Aerospace will provide major repair and re-coring services for the heat transfer equipment on Loong Air's A320ceo/neo fleet *© AirTeamImages*

Liebherr-Aerospace (Liebherr) and Loong Air have entered into a long-term partnership under which Liebherr-Aerospace will provide major repair and re-coring services for heat transfer equipment across the airline's Airbus A320ceo and A320neo fleet. The re-coring work, including complete matrix replacement, will be performed at Liebherr's Shanghai Pudong facility in China, the company's dedicated service centre for Chinese customers. "This contract with Loong Air marks a milestone for our re-core activities in China and opens the door to strong future opportunities," said Eric Thévenot, General Manager, Customer Services & MRO, Liebherr China. "Together with our skilled service team in Shanghai, we are enhancing regional support while delivering Liebherr-Aerospace quality through a REACH-compliant coating process that helps airline customers prepare for future environmental requirements." Under the agreement, Loong Air will oversee cleaning, minor repairs and testing procedures, helping to maintain the highest standards of quality and reliability for its heat transfer equipment. As the original equipment manufacturer (OEM), Liebherr will support the airline with technical expertise, access to technical publications, training and spare parts to facilitate maintenance operations. Liebherr recently expanded its maintenance, repair and overhaul (MRO) capabilities in Shanghai to meet rising demand for advanced maintenance solutions across the region. Located within the company's 20,000 m² regional headquarters, the facility offers a range of certified MRO services, including testing and re-coring of aircraft heat transfer equipment.

Finnair awards A350 landing gear overhaul deal to Liebherr

Liebherr-Aerospace will perform overhaul of the nose landing gear systems for Finnair's Airbus A350 aircraft
© *AirTeamImages*

Finnair has selected Liebherr-Aerospace to overhaul the nose landing gear systems for its Airbus A350 fleet. All overhaul work will be carried out in-house at Liebherr-Aerospace's facility in Lindenberg, Germany, drawing on the company's expertise as both the original equipment manufacturer (OEM) and a specialist provider of landing gear maintenance, repair and overhaul (MRO) services. Liebherr said the agreement comes as the aviation industry enters a new global wave of landing gear overhauls, with airlines increasingly focused on securing future maintenance capacity. The deal strengthens the long-standing partnership between the two companies and reinforces Liebherr's role in supporting Finnair's A350 operations. Liebherr-Aerospace Lindenberg GmbH developed, manufactured and certified the Airbus A350 nose landing gear system, and serves as the group's centre of competence for flight controls, landing gear systems, gears, gearboxes and electronics.

AJW opens new hub in Sofia, Bulgaria

AJW Group (AJW) has opened a new office in Sofia, Bulgaria, strengthening its European network and expanding its presence in Southeast Europe. The new facility becomes AJW's first dedicated regional hub in Southeast Europe and is designed to enhance customer support, accelerate business development and expand technical operations across the region. The office will operate as a full-service hub, supporting airline customers with operational services, technical expertise and commercial activities.
The expansion reflects AJW's long-term commitment to the growing aviation market in Southeast Europe and its strategy to capitalise on Bulgaria's strong reputation for engineering expertise, technical innovation and highly skilled professionals. AJW said the Sofia office will play a key role in supporting regional growth, enabling the company to respond more quickly to customer requirements while strengthening relationships with airlines and aviation partners across the market. Chief Executive Officer Clyde Buntrock said the investment demonstrates AJW's confidence in Bulgaria's market potential and reinforces the company's commitment to building a stronger regional presence. He added that Bulgaria has become a recognised centre for innovation and technical talent, making Sofia an ideal location for AJW to access skilled professionals while delivering more responsive support to its growing customer base across Southeast Europe.

Ribbon-cutting ceremony to celebrate the opening of AJW's new hub in Sofia, Bulgaria © *AJW Group*

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KUNZ aircraft equipment facilities
© KUNZ

Engineering the Future of Wheel & Brake MRO: The KUNZ Approach

By David Dundas

For nearly four decades, KUNZ GmbH aircraft equipment (Kunz) has been setting the standard for wheel and brake servicing technology. As global aviation demand surges and MRO operations face mounting pressure to perform faster, safer and more cost-efficiently, the right equipment has never mattered more.

Where Ground Operations Meet Critical Safety

Every commercial flight ends with a landing — and every landing puts the wheel and brake system through an extreme physical test. Within fractions of a second, the braking assembly must absorb and dissipate enormous amounts of kinetic energy under conditions of intense heat and mechanical stress. When these components reach the shop for inspection, servicing or overhaul, the equipment used to handle them must be equal to the task: precise, reliable and purpose-built for aviation's uncompromising demands.

This is exactly the challenge that KUNZ has dedicated itself to meeting since its founding in 1987. Based in Hahn am See, Germany, KUNZ has grown from a specialist manufacturer into one of the world's leading suppliers of aircraft wheel and brake servicing equipment — trusted by major airlines, MROs, OEMs and military operators across more than 100 countries.

Established in	1987
Operating Countries	100+
Based in Hahn am See	Germany
Valued Customers	400+

A Comprehensive Portfolio — Built for the Shop Floor

The KUNZ product range covers every stage of the wheel and brake servicing process. For wheel operations, this includes solutions for tyre bead breaking, wheel assembly and disassembly, wheel and rim handling, bearing servicing, wheel torquing and nut loosening, rim cleaning, and complete wheel assembly testing. On the brake side, KUNZ addresses brake assembly and disassembly, brake handling and brake hydraulic testing — covering the full overhaul cycle from intake to return-to-service.

> **"KUNZ is committed to technical excellence and continuous progress — developing equipment that is durable, efficient, and purpose-built to reduce operational costs in component service and overhaul."**

KUNZ Turnkey Solutions © KUNZ

What distinguishes KUNZ is not simply its scope of supply, but the engineering philosophy behind every product. Each machine is designed from the ground up with the realities of high-throughput shop environments in mind, ergonomic operation to protect technicians, robust construction for long service life and consistent precision to safeguard component integrity throughout the process. The result is equipment that reduces the risk of human error, shortens handling times and contributes directly to lower overall maintenance costs.

Turnkey Solutions and Complete Production Lines

Beyond individual machines, KUNZ offers something that few competitors in this space can match — the expertise to plan, design and deliver complete wheel and brake shop production lines from the ground up. Drawing on decades of hands-on experience with airline and MRO operations worldwide, the KUNZ team works closely with customers to develop tailored, lean workflow concepts — optimising the physical layout, equipment selection and process flow of the entire shop to maximise throughput and minimise waste.

This turnkey capability is particularly valuable for operators establishing new facilities, relocating operations or undertaking a full modernisation of their wheel and brake shops. Rather than assembling a patchwork of equipment from multiple vendors and hoping it integrates smoothly, customers benefit from a single point of expertise covering needs assessment, concept development, equipment supply, installation and commissioning.

Automation: The Next Frontier

The aviation MRO industry is increasingly looking to automation as a means of addressing labour cost pressures, technician shortages and the relentless push for higher throughput. KUNZ is at the forefront of this shift. The company has developed and presented the world's first fully automated wheel assembly line — a system capable of assembling more than 90 wheels in a single shift. This is not a future concept — it is an engineering reality, already demonstrating what is possible when advanced automation is applied to wheel and brake operations.

The implications for MRO operators are significant. Automated assembly lines reduce variability, eliminate fatigue-related errors and free skilled technicians to focus on tasks that require expert judgement. As airlines and MROs face growing pressure to reduce turn-around times without compromising quality, automation of this kind offers a clear, measurable path forward.

Training and Support: Knowledge as Part of the Product

KUNZ recognises that even the most advanced equipment delivers its full value only when the people operating it are properly trained. During installation and commissioning of equipment, the company offers comprehensive theoretical and practical training for technicians and shop supervisors — conducted either on-site at the

KUNZ Wheel Assembly Line © KUNZ

KUNZ Wheel & Brake Convention 2026 © *KUNZ*

customer's facility or at the KUNZ plant in Germany. These trainings are delivered by highly experienced KUNZ aircraft engineers who specialise in wheel and brake servicing, ensuring that training is grounded in real-world operational practice rather than abstract theory.

This commitment to knowledge transfer reflects a broader philosophy — KUNZ does not simply sell machines, it builds long-term partnerships with its customers, supporting them through the full lifecycle of their wheel and brake operations — from initial shop setup through ongoing technical support and equipment upgrades.

The KUNZ Wheel & Brake Convention and Open House: Where the Industry Comes Together

Every two years, KUNZ welcomes wheel and brake professionals from around the world to its facility in Hahn am See, Germany, for the biannual KUNZ Wheel & Brake Convention. The event combines live machine demonstrations under real shop conditions, the presentation of new products and technology developments and a genuine opportunity for networking among airlines, MROs, OEMs and industry specialists.

For many attendees, it is the most direct way to experience what KUNZ equipment delivers in practice — and to engage with the broader wheel and brake community in a setting that goes well beyond a conventional trade show. Year after year, the Convention reinforces KUNZ's belief that the best solutions are built in close dialogue with the people who work with aircraft wheels and brakes every day.

The Case for Investing in the Right Equipment

In a competitive MRO environment, the quality of the equipment used in the wheel and brake shop directly impacts operational performance — from technician safety and component reliability to shop throughput and overall cost efficiency. The decision to invest in purpose-built, precision-engineered servicing equipment is not simply a capital expenditure, it is a strategic choice that pays dividends across the entire maintenance operation.

At KUNZ GmbH aircraft equipment, we have spent nearly 40 years helping airlines, MROs and operators make that choice with confidence. As the demands on wheel and brake MRO continue to evolve — driven by new aircraft types, tightening regulatory standards and the growing role of automation — we remain committed to developing the technology, the solutions and the expertise our customers need to stay ahead.

Complex MRO vendor network?

We are your one stop shop for repair excellence

AJW®

AJW Group is the world-leading independent component parts, repair, lease, engine, flight hour programme, and supply chain solutions integrator, transforming efficiency in commercial, business and defence aviation.

With hubs and offices on every continent - including AJW Technique, a state-of-the-art component MRO facility in Montreal - nose to tail, we have you covered.

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End-of-Life Management for Commercial Aircraft

How we handle aircraft that reach the end of their economically viable life has changed considerably over the last 20 years

By David Dundas

It is quite remarkable to think that only 20 years ago we were only 'recycling' roughly 50% of a commercial aircraft when it reached the end of its operational life. Many of us have memories of row upon row of abandoned aircraft parked up in some remote desert location, while the alternative back then was simply to strip out the most basic parts and then confine the rest to landfill. So, what has changed today where anything up to 90% by weight of a retiring aircraft can be reused or repurposed and, just as important, what is happening in terms of end-of-life management of these aircraft?

There have been several changes to the 'operational environment' where retiring aircraft are concerned, with a major turning point occurring with the birth of modern aviation recycling just after the turn of the millennium. In 2005, Airbus launched the PAMELA project (Process for Advanced Management of End-of-Life Aircraft), demonstrating for the first time that up to 85% of an older plane's weight could be recovered. Concurrently, the Aircraft Fleet Recycling Association (AFRA) was established in 2006 to regulate and elevate industry standards. The second major change was the emergence of Used Serviceable Material (USM) as a viable alternative to Original Equipment Manufacturer (OEM) parts which provided an even greater incentive to recover as much of an aircraft during the teardown process. Beyond this, when it comes to engines, today you can expect more than 99% of, say, a CFM56 engine's parts and materials to be recycled or recovered at the end of its operational lifespan.

The third change to the operational environment has been the emergence and continuation of supply chain problems that began with the onset of the COVID-19 pandemic. This problem has become so great that it not only relates to OEM parts but also USM as well. The fourth change has been in relation to aircraft supplies rather than the supply chain itself. Both Airbus and Boeing have encountered problems which have led to severe delays in the production of their most popular narrow-body jets. While Airbus is struggling with delivery delays of much needed Pratt & Whitney engines, Boeing is only just getting production back on track after two fatal 737 MAX crashes and an in-flight door plug blowout.

As a consequence of the last two changes, a virtual dichotomy has developed concerning when aircraft reach the end of their life. Logically, with a shortage of new planes coming off the production line, carriers are being forced to delay renewing their fleets and OEMs are now required to keep these older aircraft operational. The problem is that older aircraft require more replacement parts than new aircraft, and the supply chain is put under extra pressure, especially as those older aircraft would have been earmarked for teardown and the parts used for replenishing the supply chain. At the other end of the scale, the shortage of engines for certain models plus the strong demand for USM has seen aircraft as young as two years old reaching the end of their commercial life and being bought for teardown.

With such drastic changes all round, end-of-life management of aircraft has, unsurprisingly, also changed considerably over the last twenty years, and particularly after the pandemic. We wanted to catch up with several MRO-connected companies to get their take on a few of the most pertinent aspects of today's management practices and decision drivers.

What factors determine whether an aircraft is parted out, stored, or sold as a whole asset?

There is no question that there are a whole range of factors that didn't exist five years ago, let alone 20 years ago, so we were curious to see which were currently key.

James Bennett, Chief Commercial Officer at AerFin Ltd cuts straight to the chase as he advises that the decision ultimately comes down to value. "Asset owners, lessors and managers assess whether an aircraft will generate greater returns through continued operation, storage for future use, or disassembly and sale of its individual components. A range of factors influence this assessment, including the aircraft's age, maintenance status, engine condition, remaining life on key components, lease prospects and overall market demand for the aircraft type. If there is a strong operator market and the aircraft's value in service exceeds its teardown value, selling or leasing the aircraft as a whole is often the preferred option. Storage may be chosen when market conditions are temporarily weak but future demand is expected to recover. This preserves flexibility while allowing owners to wait for a more favourable market environment. Parting out becomes attractive when the combined value of engines, landing gear, APUs and other serviceable components exceeds the value that could be achieved through a sale or lease. In these cases, detailed teardown modelling is used to compare potential recovery values against future revenue opportunities. At AerFin, these decisions are supported by real-time market intelligence, component demand forecasting and extensive aftermarket trading data to identify the optimal asset strategy," he tells us.

Daniel Tautges, SVP Component Control

David Strockbine, Vice President, Assets & Leasing at Aero Engine Solutions is of a similar mind to James Bennett, though he looks at the situation from a slightly different angle, suggesting that: "The primary factor in determining whether an aircraft or engine should be parted out, stored, or sold as a whole asset is whether the cost to return it to service exceeds its current market value as an operational asset. Beyond that initial assessment, the decision becomes more specific to the asset owner's objectives and market conditions. Owners and lessors must evaluate factors such as current demand for used serviceable material (USM), lease return timing, maintenance status, engine condition, and projected residual values. Ultimately, the goal is to maximise the end-of-life value of the asset. Depending on market dynamics and the condition of the aircraft or engine, that value may be best realised through teardown and parts recovery, strategic storage, or sale as a complete asset." However, for Lindsay Cooper, Director of Asset Management at AJW Group, age is the primary driver as she informs us that as aircraft mature, operating and maintenance costs often become too expensive to maintain relative to their revenue generation. She continues: "This drives older airframes toward teardown and part-out scenarios, where their residual value is maximised through component recovery. We place an emphasis on maintenance history and structural integrity. Well maintained aircraft with solid airframes generally produce components in superior condition, which translates directly to higher market value. Quality components from the right aircraft types can command premium pricing and support airlines opting for USM rather than new components. A further consideration is the current market demand for specific components, regulatory compliance requirements, lease agreement terms, and manufacturer characteristics. Economic factors like fuel prices and passenger demand influence these decisions. Equally important are practical things such as proximity to teardown facilities and access to skilled technicians, these may make or break the feasibility of a project. AJW actively pursues newer-generation aircraft to meet our customers' evolving needs. Our competitive advantage lies in our expertise in asset evaluation and our efficient removal and repair processes. This allows us to maximise value recovery while ensuring components meet the exacting standards our airline customers demand. There are other variables involved that determine the economies of a part-out decision, as has occurred on Pratt & Whitney-powered NEOs and a small number of B787s."

For Daniel Tautges, SVP at Component Control, "The decision is primarily driven by market demand, aircraft age, maintenance status, engine condition, and residual asset value. If an aircraft remains economically viable and there is demand from operators, selling it as a whole asset often generates the highest return. Storage may be chosen when market conditions are temporarily unfavourable or when operators anticipate future demand for the aircraft type. Part-out becomes attractive when the combined value of individual components exceeds the aircraft's market value as a complete asset. Aircraft nearing retirement often contains engines, landing gear, avionics, and rotable components that remain highly desirable in the aftermarket. Teardown decisions are increasingly supported by data-driven analysis of component demand, repair costs, and projected aftermarket pricing. Changes in the aircraft leasing business have also increased the opportunity for greater visibility and profit in aircraft lifecycle management." Similar to Daniel Tautges, Eoin Doherty, VP Pricing at EirTrade Aviation looks upon age as a key factor, primarily when an aircraft is of an age to be nearing the end of its operational

> **"Teardown decisions are increasingly supported by data-driven analysis of component demand, repair costs, and projected aftermarket pricing."**
>
> *Daniel Tautges, SVP Component Control*

life. Interestingly, he goes on to say that "Specifically with engines, once the Life Limited Parts (LLPs) reach low life and there is no desire to complete LLP replacements during shop visits, engines are typically torn down, depending on the asset type and the market demand for whole assets. Fleet retirements can also speed up part-out decisions as certain aircraft become phased out of airline fleets. Alternatively, companies may choose to 'flip' whole assets: if there is strong market demand and it is possible, engines can be rebuilt and reinstalled onto another aircraft or put back on lease. This will happen if the value of a 'flip' outweighs the value of trading the parts after teardown."

Greg Creekmore, Regional Sales Manager – Americas at Inventory Locator Service has identified three key factors that he feels are the principal determinants - economics, market demand, and projected return on the asset. He then expands on this: "If an aircraft still has strong operator demand and lease potential, selling it whole is usually the best option. If the greatest value is in the engines, landing gear, avionics, and components, teardown becomes more profitable. Tools like the ILS Asset Analyzer help owners evaluate market demand, component values, and teardown yields using IPC-based analytics down to the piece-part level. Storage is typically a timing strategy when owners expect market conditions or asset values to improve." Kensuke Nakamura, SVP, Business Development at Werner Aero LLC is concise and clear in his thinking, and like many others, implies that there is no single deciding factor. "It depends on various factors, for example, such as aircraft condition, market demand, and stance of aircraft owners, etc. Aircraft condition – maintenance is recently provided and extended, or it will expire soon. Market demand – which demand of flyable aircraft or used serviceable parts would be stronger then. Stance of aircraft owners – they needs to sell right away, they can monitor the market and wait, and they can consider utilising some of removed parts in a better way," he suggests.

Valentina Pilshchikova, Engines & Parts Trading Sales Manager at Vallair provides a comprehensive overview of the challenge suggesting that it is "fundamentally an economic analysis," based on such factors as market demand, aircraft condition, aircraft age, technical factors, and overall asset value. She then advises that: "The decision to part out is simple: if the value of the parts is higher than the value of the aircraft as a complete asset, parting it out is the preferred course of action. It is straightforward when you consider that the market value for an engine may be twice its base value due to supply chain disruptions and technical issues. In recent years, Vallair has observed that relatively young aircraft with strong engines are being torn down because of this. For example, A320neo aircraft equipped with GTF engines, the lease value of which can be higher than the value of the entire aircraft in some cases. For lessors, the decision to part out can be accelerated by maintenance costs. In many cases, aircraft owners would rather reap financial rewards instantly rather than invest in engine overhauls or airframe work. In other words, they prefer to keep cash in the bank, not cash in metal. Some lessors have already informed us of their intention to sell airframes for teardown. It will be interesting to see how many Spirit aircraft may ultimately be parted out. Storage becomes an attractive option when current demand is weak, or when the market makes it financially difficult to sell. Owners may wish to store an aircraft and depreciate the asset slowly, rather than sell it at a low price and realise the loss immediately. These owners would then reap the rewards of retaining their assets when the market improves and they can resume operation of the aircraft or sell it at a more favourable price. If part out is about maximising returns by keeping cash in the bank, then storage is about minimising losses by keeping cash in assets. Lastly, sale of whole assets may be chosen by lessors when they are faced with costly transitions for mature, third-lease aircraft. In such cases, owners will once again prefer to monetise their assets quickly in a favourable market. Considering the current worldwide market situation, the decision is mainly driven by which option provides the fastest and best commercial return."

Which aircraft components typically retain the highest value at end of life?

While there is a very logical element to this question, what we will be interested to discover is how supply chain problems may have altered the value of components and whether this is a fluid situation. Perhaps it is not possible to identify specific components, but more a specific type of component. "In general, components with life-limited characteristics retain the highest and most predictable value at end of life. These include parts with defined cyclic or hour-based limits, as well as components subject to repair cycle restrictions, such as limits on the number of times a part can undergo specific repair processes. High-value assets commonly include engines, LLPs (life-limited parts), APUs, and landing gear components, as demand

David Strockbine, Vice President, Assets & Leasing, Aero Engine Solutions

> **"In general, components with life-limited characteristics retain the highest and most predictable value at end of life. These include parts with defined cyclic or hour-based limits, as well as components subject to repair cycle restrictions, such as limits on the number of times a part can undergo specific repair processes."**
>
> *David Strockbine, Vice President, Assets & Leasing, Aero Engine Solutions*

for these items remains consistently strong within the aftermarket and MRO sectors. The value of these components is largely driven by their remaining usable life, traceability, repairability, and continued relevance within active fleets" says David Strockbine. Lindsay Cooper on the other hand seems to be leaning more to the fluid side of things, telling us that: "The value of components is heavily influenced by supply and demand. When demand for specific aircraft materials or components is high and the supply is limited, prices tend to soar. Conversely, in times of reduced demand and ample supply, prices may decline. The intrinsic value of certain components also plays a role; items like engines or avionics systems often command higher prices due to their complexity and essential role in aircraft operation. However, as mentioned, market conditions, economic fluctuations, and external factors such as fuel prices all influence pricing. In general, though, items such as engines and landing gear, APUs, thrust reversers, integrated drive generators (IDGs), Air Data Inertial Reference Units (ADIRUs), and avionics systems tend to hold the highest value at end of life."

As is becoming more apparent, engines seem to be top of the list, with Daniel Tautges and Kensuke Nakamura in accord with many others. Tautges suggests that "...engine assemblies and individual engine modules can account for a significant portion of total asset recovery value," but acknowledges that there are other assets including "...APUs, landing gear systems, avionics, flight control components, and certain high-demand rotable parts.

James Bennett, Chief Commercial Officer, AerFin

Components with extensive traceability records, recent overhauls, or remaining service life and aircraft in-service rates tend to command premium pricing. Market demand also plays a major role, particularly for components supporting aircraft types that remain in active service globally." According to Nakamura, "Engines account for most of the value of retiring aircraft. But, other than engines, components with the highest value can be APUs, landing gears or nacelles, subject to aircraft type, market demand and the maintenance condition of such components." However, Eoin Doherty also recommends we look beyond engines on an aircraft for high-value components such as: "landing gears, APUs and the avionics. On certain aircraft types, nacelles (thrust reversers, inlet cowls, etc.) can also hold a vast amount of value. For landing gear, driving factors of price tend to be the number of overhaul intervals or cycles operated. For APUs, the main driver is usually life remaining on the LLPs." Meanwhile, Greg Creekmore suggests that engines are typically the largest value driver, acknowledging, like Eoin Doherty, that " ...APUs, landing gear, avionics, and other high-demand rotables generally retain the strongest aftermarket value. Components with high replacement costs, long repair cycles, or limited availability tend to perform best in the USM market. Serviceable material supporting active fleets is especially valuable because airlines and MROs rely on it to reduce maintenance costs and avoid long OEM lead times. Ultimately, the parts that retain value are the ones operators consistently need to keep aircraft flying economically and efficiently."

While acknowledging that engine parts retain highest value, Valentina Pilshchikova notes that: "not all engines retain the same value." She is then quite blunt when she makes it very clear that: "When an OEM tightly controls the repair market, the end-of-life residual value of the engine (which should normally represent up to 80% of the aircraft's value) can be significantly impacted. I will not name and shame monopolistic aftermarket OEMs, but I will praise the fair and wise approach of CFM and GE Aerospace. They have an open aftermarket network, which allows them to overcome the teething issues of new engine programmes more effectively and ensures product longevity by preserving asset value at the end of life. It also enables more competitive maintenance and repair costs compared to a fully controlled environment, which remains the business model of some competitors." To round this section off, while in agreement with everyone else in terms of engines and nacelles, landing gear assemblies, etc., James Bennett makes a very prudent comment, pointing out that: "Value retention is heavily influenced by fleet size, aircraft popularity and operator demand. Components from in-production aircraft with large active fleets generally maintain stronger values than those from older or less widely used platforms. Ongoing trading activity across the aftermarket provides valuable insight into which assets continue to demonstrate the strongest liquidity and demand throughout their lifecycle."

How do operators and lessors maximise returns from used serviceable material (USM)?

Here Lindsay Cooper give us a clear insight into what happens at AJW Group, placing emphasis on the fact that "... maximising USM returns requires a disciplined, data-driven approach from the outset." She continues: "Our teams begin with a rigorous initial appraisal to establish the aircraft's baseline value, calculating remaining green time, and conducting a thorough condition assessment. This foundation is critical. From there, we develop a detailed harvest list, leveraging both historical performance data and current repair costs alongside fair market value (FMV) analysis. This allows us to

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build a comprehensive business case and project a realistic return on investment before we commit our resources. What many don't appreciate is the importance of a complete aircraft and records audit. We meticulously establish the full maintenance history because this directly impacts aftermarket resale value. Components with documented, clean maintenance records can deliver a high return in the secondary market. It's not just about what a part is, it's about proving what it's been through. When it comes to disassembly, our process is thorough. We begin with external components, then systematically progress through internal systems, avionics, and high-value equipment. We cross-reference every component against its associated paperwork and maintenance documentation. This traceability is invaluable as it substantiates airworthiness, supports regulatory compliance, and ultimately commands better pricing from operators and MROs seeking certified material." Beyond this, Daniel Tautges makes an interesting point in that "Successful USM strategies begin with comprehensive asset planning before an aircraft is retired." He then further explains: "Operators and lessors maximise returns by identifying high-demand components, ensuring complete maintenance records, and carefully managing removal, inspection, and certification processes. Technology plays an increasingly important role in this process. Modern aviation ERP systems such as Quantum Control help organisations maintain traceability, manage inventory lifecycles, monitor repair costs, and gain visibility into component demand across their operations. Having accurate data readily available enables companies to make informed decisions about whether to repair, stock, exchange, or sell a component. Ultimately, maximising USM value requires balancing component repair costs, market demand, certification requirements, and inventory holding periods while maintaining full regulatory compliance and asset traceability."

Eoin Doherty sees the ability to sell on OEM in 'installation-ready' condition as vital when looking to maximise the value of parts. "In order to get maximum value from line components after teardown, components are sent to a repair facility to be repaired or overhauled. The seller can then provide material that is ready to be installed on another aircraft or engine, which allows them to sell at higher prices, especially during critical and AOG requirements. In addition to this, it is important to have high-quality technical documentation supporting this material. Poor paperwork can often have pricing implications, especially on life-limited parts," he cautions. Beyond this, Greg Creekmore identifies four important factors when looking to maximise returns on USM, namely "...strong documentation, an effective repair strategy, timing, and market visibility." He backs this up by stating that "Components with complete traceability, clean maintenance records, and solid repair history consistently achieve higher values and sell faster in the aftermarket. Repair decisions are also critical. In many cases, investing in the right repair or overhaul can significantly increase a component's resale value and expand the buyer pool. Understanding real-time market demand is equally important so operators and lessors can prioritise high-value inventory. Platforms like ILS play a major role by providing market intelligence on pricing, availability, and demand trends while giving sellers global exposure to airlines, MROs, OEMs, and distributors actively sourcing material. That visibility helps improve inventory turns and maximise overall USM returns."

Beyond maintaining pristine back-to-birth traceability, Valentina Pilshchikova places further emphasis on operators to "...balance maintenance reserves and LLP residual life. On CFM engines, LLPs with cycle remaining (CR) above 8,000 cycles will have excellent remarketing potential compared to LLPs with only 4,000 cycles remaining. The market becomes extremely narrow with lower-cycle LLPs, as it makes little sense to build an engine capable of running 10,000 cycles with a limiting LLP stack of only 4,000 cycles. In such a case, you effectively waste 6,000 cycles of the engine's economic and performance life. Beyond these fundamentals, maximising returns from USM is primarily about inventory management. At Vallair, our Material Management & Trading department focuses on identifying high-demand parts and optimising stock levels accordingly. Over the long term, selling serviceable parts individually from aircraft teardowns often generates higher value than selling the entire aircraft. The key is getting the timing right: parts must be available for immediate delivery when demand and pricing are at their peak."

David Strockbine makes it very clear that: "To maximise returns from used serviceable material (USM), operators and lessors must ensure they are utilising the most effective end-of-life monetisation strategies available. This requires a strong understanding of market demand, asset condition, repair economics, and timing. He adds that: "Organisations can manage this internally or partner with industry specialists such as Aero Engine Solutions (AES), which supports operators and lessors through tailored end-of-life monetisation and consignment programmes. At AES, we have spent the past decade developing strategic relationships across the supply chain, including MROs, operators, lessors, and aftermarket buyers. These partnerships enable us to optimise asset disposition strategies and maximise value recovery for our customers." To conclude this section, James Bennett puts it very succinctly:

Valentina Pilshchikova,
Engines & Parts Trading Sales Manager, Vallair

> **"Over the long term, selling serviceable parts individually from aircraft teardowns often generates higher value than selling the entire aircraft."**
>
> *Valentina Pilshchikova, Engines & Parts Trading Sales Manager, Vallair*

"Operators and lessors can maximise value from the USM market in two key ways: by reducing maintenance and transition costs, and by generating revenue from surplus assets and aircraft." He then goes on to say that: "Airlines and lessors are increasingly using USM as a cost-effective alternative to new OEM parts without compromising safety, reliability or regulatory compliance. Serviceable components are inspected, certified and returned to service at a significantly lower cost than new material, often delivering savings of between 30 and 70 percent. Beyond the lower acquisition cost, USM can help reduce inventory investment, mitigate supply chain disruptions and minimise aircraft-on-ground time by providing faster access to replacement components. This is particularly valuable for mature fleets, where new parts may be expensive, subject to long lead times or no longer be readily available. Repair exchange programmes can provide additional savings. In these arrangements, an operator receives a serviceable replacement component immediately and, provided the removed unit can be successfully repaired, only pays the repair cost and an exchange fee. This helps maintain operational continuity while reducing maintenance expenditure. Operators and lessors can also generate value by selling surplus aircraft, engines and spare parts into the USM market. As aircraft approach the end of their operational life, selling assets to specialist aftermarket companies such as AerFin can often unlock greater value than continued storage or operation. Maximising returns depends heavily on the quality of the accompanying records. Complete traceability, accurate maintenance documentation and robust airworthiness records all enhance marketability and can significantly increase the value achieved when material is sold. By combining strong asset management practices with an understanding of market demand, operators and lessors can optimise both the cost-saving and revenue-generating opportunities offered by the USM market."

Engine removed from aircraft
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What role do engines, APUs and landing gear play in overall asset recovery economics?

The recurring theme from contributors here is that engines, APUs, and landing gear are recoverable assets with the highest value. As Daniel Tautges at Component Control says: "In many teardown projects, engines alone may represent the largest portion of recoverable value due to their high replacement costs and ongoing demand for serviceable modules and piece parts. Landing gear assemblies are similarly valuable because they undergo regular overhaul cycles and can remain economically repairable for extended periods. APUs often provide attractive recovery opportunities due to their widespread use and relatively consistent aftermarket demand. The condition, maintenance history, and remaining life of these assets significantly influence whether a retirement project achieves its expected financial return." EirTrade's Eoin Doherty and Greg Creekmore at Inventory Locator Service concur with Tautges, particularly in relation to landing gear. "Landing gear, especially, can have huge value in the USM market if freshly overhauled. Engine LLPs also have substantial value, depending on the asset type and life remaining. Modules can be repaired and sold whole or completely torn down and LLPs sold individually. This can hold significant value, and shortages will typically drive the price higher in the aftermarket," Doherty shares with us. Similarly, Creekmore comments: "Engines, APUs, and landing gear are the primary drivers of aircraft asset recovery value and often determine whether a teardown is financially viable. Engines

Eoin Doherty, Vice President of Pricing, EirTrade Aviation Ireland Ltd

> **"Modules can be repaired and sold whole or completely torn down and LLPs sold individually. This can hold significant value, and shortages will typically drive the price higher in the aftermarket."**
>
> *Eoin Doherty, Vice President of Pricing, EirTrade Aviation Ireland Ltd*

typically represent the largest share of recoverable value due to remaining LLP life, maintenance status, overhaul economics, and strong global demand across active fleets." He then underlines that: "In many cases, the engines alone can justify the teardown," before concluding: "APUs and landing gear also generate significant recovery value because of their high replacement costs and steady aftermarket demand. Operators and MROs frequently seek serviceable or repaired units to avoid expensive new equipment purchases and long OEM lead times. Together, these high-value assemblies form the foundation of most teardown business cases and largely determine the profitability of the asset recovery process."

Valentina Pilshchikova at Vallair feels that engines, APUs, and landing gear "... can represent 80-85% of the total value of the asset," adding that: "their condition, remaining life, and demand have a direct impact on overall recovery economics." Beyond engines, at AerFin Ltd James Bennett also agrees that "Landing gear and APUs provide additional high-value recovery opportunities, supported by mature overhaul, repair and exchange markets. Together, these assets can account for a substantial proportion of an aircraft's recoverable value, while the remaining airframe components contribute further incremental returns." He then adds: "At AerFin, detailed valuation and recovery modelling of these assets plays a central role in acquisition, leasing and teardown investment decisions, helping ensure that each asset is managed to deliver the strongest possible outcome."

David Strockbine at Aero Engine Solutions is slightly more conservative than Valentina Pilshchikova. While acknowledging like everyone else that engines, APUs, and landing gear are typically the most significant value drivers in the overall end-of-life monetization of an aircraft, he feels that: "...these assets can account for approximately 50% to 70% of the total recoverable value, with engines representing the largest share." He then goes on to say that: "Engine value is influenced by factors such as remaining life on LLPs, maintenance status, market demand, and engine variant applicability across active fleets. Similarly, APUs and landing gear assemblies can generate substantial value due to their high replacement and overhaul costs. As a result, the condition and marketability of these major assemblies often play a decisive role in determining the overall recovery strategy for an aircraft asset." Lindsay Cooper then explains that for AJW, the focus isn't solely on dismantling aircraft. Instead, she makes it very clear that where engines, APUs and landing gear are concerned, "... the discipline lies in managing all three simultaneously, understanding not just their individual value, but how they interact across market cycles." She goes further: "Timing is critical. So is technical insight, particularly around maintenance condition, documentation, and traceability. Effective asset recovery isn't about dismantling aircraft; it's about unlocking value. Engines, landing gear, and APUs are the levers we pull but it's the strategy behind how and when we pull them that differentiates a transactional teardown from a truly optimised recovery programme."

How do MRO capabilities influence the decision to repair versus scrap a component?

As with many areas involving MRO and spare parts, there is no one-size-fits-all solution to many challenges, and whether to repair or scrap a recovered component depends on a number of individual factors. In the opinion of Eoin Doherty and Valentina Pilshchikova, market demand is the principal driver. As Doherty puts it: "Repair decisions are driven by the demand for components as well as the cost to repair or overhaul these units. In order to get maximum value, high-demand material is commonly sent to the repair shop to be tagged. Once those parts undergo their inspections, they will sometimes be deemed outside of limits, damaged or unrepairable. This would usually drive the decision to scrap the part depending on the findings from the repair vendor. In some cases, parts can be sent to alternative shops for DER (Designated Engineering Representative) repairs, depending on the demand for these types of parts." For Pilshchikova: "The first consideration is market demand. If a part is slow-moving, it may be preferable to keep it in 'repairable' condition and only repair it on demand. Another approach is to maintain one serviceable set ready for immediate use while holding the others in "as removed condition" or scrapping them if the market is oversupplied. If the MRO team can restore the component safely, quickly, and cost-effectively, the part is given a second life. If not, it retires gracefully. The decision ultimately comes down to balancing cost, turnaround time, and technical feasibility."

From a different perspective, the key factor for Greg Creekmore is very straightforward as, in his opinion: "The decision is based on repair cost, turnaround time, material availability, and the projected market value after repair. If a component can be repaired economically and there is strong aftermarket demand, repairing it usually provides a better return than scrapping it. If repair costs exceed the component's market value or turnaround times are too long, scrapping may be the better option. ILS helps operators, lessors, and MROs make these decisions by providing real-time

Greg Creekmore, Regional Sales Manager – Americas, Inventory Locator Service

> **"ILS helps operators, lessors, and MROs make these decisions by providing real-time market pricing, inventory availability, and demand data for repaired material across the global aftermarket."**
>
> *Greg Creekmore, Regional Sales Manager – Americas, Inventory Locator Service*

market pricing, inventory availability, and demand data for repaired material across the global aftermarket." James Bennett expands further: "A part that has limited value in an unserviceable condition may become highly marketable once repaired, recertified and returned to the supply chain. When assessing repair opportunities, asset managers evaluate repair costs, turnaround times, the likelihood of a successful repair, expected post-repair value and current market demand. These factors are weighed against the value that could be achieved by selling the component in its current condition or scrapping it altogether. Access to approved repair schemes, engineering expertise, OEM support and experienced MRO partners can significantly improve recovery outcomes. In many cases, these capabilities allow components that might otherwise be discarded to be restored as commercially viable inventory, extending their useful life and generating additional value."

David Strockbine makes several valid points, in particular noting that the capability of the MRO operator can also affect the decision whether to repair or scrap a part. "While all MROs operate in accordance with OEM inspection and repair criteria, some facilities offer more advanced or strategic repair solutions that can significantly improve repair economics," he says, continuing: "In recent years, OEMs such as CFM have supported asset owners and MRO providers by allowing more targeted and 'surgical' inspection and repair approaches during engine maintenance events. These strategies can help reduce unnecessary maintenance costs while preserving component value. Selecting an MRO with strong technical capabilities and flexible work scope management can therefore have a direct impact on reducing repair expenses and extending component life. Ultimately, repair-versus-scrap decisions must align with the component's intended operational mission and the economic viability of returning it to service." Lindsay Cooper and Daniel Tautges are also of a like mind, with Cooper noting from a personal perspective the difference having in-house capabilities can make on the decision-making process. As she tells us: "Where an organisation has in-house repair capability, engineering approvals, and test infrastructure, as AJW has with its MRO facility AJW Technique, it can often repair components at a lower cost and with greater control over turnaround time. This shifts the decision in favour of repair, allowing recovery of assets that others might consider uneconomic. On the other hand, reliance on external shops introduces higher costs, longer lead times, and less certainty, which then may push the decision toward scrapping the component. Depth of the MRO's capability also matters. Advanced diagnostics, DER repairs, and access to part pools can unlock value from components that would otherwise be written off. AJW Technique's strong MRO capability supports the Group's operations and directly expands our pool of recoverable USM." Tautges echoes Cooper as he points out that: "Organisations with in-house repair capabilities, specialised tooling, technical expertise, and established repair approvals may be able to restore components at a lower cost and achieve higher resale values. Equally important is access to operational and financial data. MRO software platforms such as Quantum Control provide visibility into repair history, labour costs, material consumption, inventory availability, and component profitability. This information allows organisations to make more informed decisions regarding repair versus replacement and helps identify when a component may no longer be economically viable. The ability to accurately assess repair costs, expected resale value, turnaround times, and market demand is critical in determining the most economically advantageous outcome."

Kensuke Nakamura, SVP, Business Development, Werner Aero LLC

At what point does a component become "beyond economical repair" (BER)?

Opinions on this aspect are all remarkably similar, in that the crossover point is where, as Greg Creekmore puts it: "...the cost to repair, overhaul, or recertify the part exceeds its realistic market value or expected return after repair. While the component may still be technically repairable, the economics no longer support the investment." He adds that: "BER decisions are based on factors such as repair cost, turnaround time, remaining service life, replacement availability, and current market demand. Companies often use historical data and market intelligence tools like ILS to evaluate pricing, inventory availability, and demand for replacement material. This helps operators, lessors, and MROs compare repair costs against actual aftermarket values and make more informed BER decisions." Kensuke Nakamura at Werner Aero LLC gives a slightly deeper insight, telling us that: "we should consider the repair cost, repair slot availability at the MRO, and repair turnaround time (TAT). Repair costs have been increasing recently, and I would say that 70% is one criterion for BER. When the repair cost reaches 70% of the replacement acquisition cost in the market, it becomes difficult for the repaired component to generate profit." Similarly, James Bennett looks at the

> **"Repair costs have been increasing recently, and I would say that 70% is one criterion for BER. When the repair cost reaches 70% of the replacement acquisition cost in the market, it becomes difficult for the repaired component to generate profit."**
>
> *Kensuke Nakamura, SVP, Business Development, Werner Aero LLC*

Retired aircraft © *Shutterstock*

problem in greater depth, suggesting that: "A component is generally considered beyond economical repair when the cost, complexity and risk of returning it to service exceed the value that can reasonably be recovered once the repair is complete. This assessment takes into account a range of factors, including repair and overhaul costs, material replacement requirements, remaining useful life, market demand, the availability of alternative serviceable units and any uncertainty around the repair process itself. For example, if a component requires a repair costing US$50,000 but is only expected to achieve a market value of US$30,000 once repaired, it would typically be classified as BER. However, this threshold is not fixed. During periods of supply chain constraint or material shortages, aftermarket values can rise significantly, making previously uneconomic repairs commercially viable once again. As a result, BER is often a dynamic commercial assessment rather than a purely technical determination, influenced by both market conditions and the availability of repair solutions."

David Strockbine confirms that the determination to repair or discard USM Is determined based on such parameters as repair costs, material availability, turnaround time, remaining service life, and current market pricing for serviceable or overhauled units. He then points out that "One advantage of working with AES is our broad market access and inventory availability. In situations where serviceable or overhauled units are limited, AES can often provide an 'as removed' (AR) replacement unit and manage the inspection process to determine whether it can be restored more economically than the original component. This approach helps customers minimise maintenance costs while maximising asset recovery value." Daniel Tautges adds further valuable insight into the BER debate when he comments that: "As aftermarket values fluctuate, a component considered BER today may become economically repairable in the future if supply shortages or market conditions change. For this reason, BER evaluations increasingly rely on real-time operational and operational market data"

Eoin Doherty also highlights that if there is a shortage of a particular component which then drives the price upwards, it becomes more unlikely for a part to be deemed BER, he adds useful further insight when remarking that there are, however, "...some components which tend to have expensive repair costings due to the need for replacement subcomponents within the part itself. If these subcomponents are expensive to source, it becomes more difficult to repair the unit without it being deemed BER," while to conclude, both Lindsay Cooper and Valentina Pilshchikova sum up BER in respective nutshells. According to Cooper: "BER is less a fixed point and more a commercial judgement, balancing technical feasibility against realisable market value at a given moment," though Pilshchikova sees it as: "... fundamentally, a straightforward economic analysis."

> **"BER is less a fixed point and more a commercial judgement, balancing technical feasibility against realisable market value at a given moment."**
>
> *Lindsay Cooper, Director of Asset Management, AJW Group*

Lindsay Cooper, Director of Asset Management, AJW Group

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The Internal Sheriff: The True Role of the Quality Assurance Department in Aircraft Maintenance

By David Dundas

In aircraft maintenance, where safety, compliance, and reliability are paramount, the Quality Assurance (QA) department in any MRO set-up plays a role that goes far beyond regulatory oversight. While often perceived purely as a control function—and frequently encountered as a bottleneck—QA is, in reality, the cornerstone of disciplined operations. It serves as an organisation's "internal sheriff", ensuring that standards are upheld consistently, irrespective of any operational pressures or commercial demands.

This role of the internal sheriff is not about policing for its own sake but more about safeguarding the integrity of the entire maintenance ecosystem.

Beyond Compliance: QA as a Strategic Function

On the surface, QA may appear to be responsible for ensuring compliance with regulatory frameworks such as EASA Part-145 or FAA requirements. However, in a today's MRO environment, this appearance is far too shallow. Beyond the obvious, effective QA departments also function as risk managers, process guardians, and drivers of continuous improvement.

They ensure that maintenance activities are not only compliant on paper but executed correctly in practice. They verify that documentation reflects reality, that procedures are followed consistently, and that deviations are properly controlled. In doing so, QA protects MROs from operational disruptions, adverse audit findings, and reputational damage.

As MRO operations become more complex while striving for even greater efficiency and cost-effectiveness—driven by tighter turnaround times, globalised supply chains, and increasing digitalisation—the importance of a highly robust Quality Assurance Department intensifies.

The Internal Sheriff: Independence, Authority, Accountability

The concept of a QA department as an "internal sheriff" encapsulates three essential attributes that define its effectiveness.

First there is independence. Any quality assurance system has to remain structurally and culturally independent from production and commercial functions. This separation ensures that decisions are not influenced by schedule pressure or cost considerations. When an aircraft is due for release or a delivery deadline looms, those responsible for QA must be able to make impartial judgments based solely on compliance and safety.

Second there is authority. Independence alone is insufficient if QA lacks the power to act. A credible QA


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department must have the authority to stop work, escalate issues, and enforce corrective actions. Without this authority, the QA department's role becomes that of advisory rather than decisive—an arrangement that ultimately undermines both compliance and safety.

Third there is accountability. The QA department should ensure that every maintenance action is traceable and verifiable. In an industry where documentation is as critical as the work itself, the QA department should be there to confirm at all times that records are complete, accurate, and aligned with the physical condition of any aircraft in question. This accountability is fundamental not only for audits but for maintaining long-term airworthiness.

Productive Tension: QA vs. Operations

A natural tension, almost a conflict of interest, exists between operational efficiency and quality oversight. Maintenance teams are always focused on turnaround times, effective resource utilisation, and on-time delivery. Failure to meet given targets can have far-reaching repercussions. Those in the QA department however are focused solely on adherence to procedures, documentation integrity, and risk mitigation. The problem is, there cannot be a compromise where QA is concerned

This tension is often misunderstood as a problem. In reality, it is a necessary and would be better viewed as a healthy dynamic. The main reason for this is that it creates a system of checks and balances that prevents shortcuts and ensures discipline.

Problems are likely only to arise when this balance is lost. If QA is weakened or even bypassed, short-term gains in efficiency will more often than not lead to long-term consequences—such as adverse audit findings, the need for reworking, or even safety incidents. On the other hand, if QA functions in such a way as it does not take into account a necessary understanding of operational realities, it risks becoming overly rigid and disconnected.

To overcome any potential problems in this area, the most effective organisations foster collaborative alignment, where QA and operations collaborate closely towards achieving the same objective: safe, compliant, and efficient maintenance.

The Hidden Costs of Weak and Ineffective QA

The absence of a strong QA set-up within an MRO organization is highly unlikely to result in any immediate failure. Instead, it is more likely to result in a gradual erosion of standards. If you want to identify any particular warning signs of this happening, these can usually be found in the form of recurring audit findings, inconsistent documentation, traceability gaps, and the normalisation of informal workarounds. Over time, these issues tend to become compounded, increasing both operational risk and financial exposure.

In aviation, where there really is no room for error in terms of safety margins, such erosion is unacceptable. Weak QA does not merely reduce compliance—it undermines the entire safety framework of the MRO organization.

QA in the Digital Era

Digital transformation is reshaping MRO operations, introducing new tools such as electronic technical logs, predictive


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maintenance systems, and integrated ERP platforms. While these technologies offer significant efficiency gains, they also expand the scope of QA.

One critical area of any digital transformation is data integrity. Digital systems rely on accurate input, and errors can propagate quickly across interconnected platforms. QA must ensure that digital records accurately reflect physical reality and that data governance standards are enforced.

Another area is process automation. Automated workflows can reduce human error, but they also require rigorous validation. QA must verify that system logic is correct, that exceptions are properly handled, and that automated decisions remain compliant with regulatory requirements.

Finally, cybersecurity and access control are becoming increasingly relevant. As maintenance systems become more interconnected, QA's oversight extends into ensuring that data is protected, access is controlled, and audit trails are maintained.

The internal sheriff is no longer confined to the hangar floor—it now operates across the digital infrastructure of an MRO organisation.

Building a Culture Based on Quality

While a QA department can provide structure and oversight, it is impossible for any single department to ensure sustainable quality and instead it has to be embedded in the organizational culture. Thus, in high-performing MROs, technicians take ownership of their work, compliance is understood rather than imposed, and errors are reported transparently. An effective QA department should support this culture by setting standards, monitoring adherence, and ensuring accountability. However, what it cannot do is replace individual responsibility.

When a QA department is seen as a partner rather than an obstacle, the entire MRO organization is going to benefit.

From Cost Centre to Value Driver

QA is often perceived as a necessary cost—an overhead required to satisfy regulators. However, this perception overlooks its broader economic impact as a robust QA function reduces the need for any rework and enhances operational consistency. Additionally, it builds trust with customers and regulators, which in turn supports business growth and contract retention.

In this sense, QA does not merely protect value—it actively creates it by enabling reliable, scalable operations.

In Conclusion: QA is a Role That Cannot Be Compromised

In aircraft maintenance, safety is paramount and the margin for error is effectively zero. Because of this, the role of Quality Assurance is basically indispensable. As the internal sheriff, a QA department within an MRO set-up ensures that standards are maintained, risks are controlled, and accountability is enforced—not in opposition to operations, but in support of safe and sustainable performance.

In an industry defined by complexity and constant pressure, one principle remains clear: without a strong and empowered QA function, there is no foundation for safe and compliant MRO operations.

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AviTrader Interviews AMETEK MRO and Werner Aero to learn more about two key elements of an aircraft that are subject to considerable and violent stresses

By David Dundas

When you consider the extreme thermal, mechanical and environmental stresses an aircraft's wheels and brakes are subjected to each time it lands, it is little wonder that considerable attention needs to be paid to them on an ongoing basis. If we take the Airbus A320 for example, roughly 40% of the aircraft's kinetic energy is transferred to the carbon disc brakes on landing, converting it into heat and resulting in a temperature increase of up to 800 degrees Celsius. When an aircraft touches down, it will be doing approximately 150 knots, and the wheels are violently spun from a dead stop, while each individual wheel will have to cope with a landing weight of approximately 20 tonnes. This means the wheel rims and axles will be subjected to extreme sheer and torsional stress.

Then, when landing under conditions where strong crosswinds are in play, this means that the wheels will be subjected to heavy lateral (sideways) and bending stresses as the pilot aligns the aircraft with the centre line of the runway. We have pressure and tyre deflection as an A320's tyres are inflated to approximately 200psi, which is about six-times the pressure of a standard car tyre! On touchdown, each tyre will rapidly compress and flex, which will test the integrity of both the tyre and wheel beads. Then, finally, we have the environment where, on a single flight, the wheels on an A320 can be forced to deal with a high-altitude temperature of -50 degrees Celsius, and will then warm up considerably upon landing.

With wheels and brakes being such key elements of an aircraft's landing gear, and the aircraft itself, we wanted to learn a little more about the skills and procedures required to ensure their proper maintenance. We are fortunate to have been able to gain valuable insights from two leading industry professionals, Ismael Fadili, VP Sales Europe & Asia at AMETEK MRO and Aslihan Uçar, Director of Business Development - Türkiye & The Middle East at Werner Aero, LLC and below is the result of the two interviews.

About AMETEK MRO:

AMETEK MRO is a division of the North American conglomerate AMETEK Inc, the original company, 'American Machine and Metals' having been founded back in 1930. While maintenance, repair, and overhaul (MRO) capabilities and individual

Aslihan Uçar, Director of Business Development - Turkiye & The Middle East, Werner Aero

business units have been on offer for some 60 to 70 years, AMETEK MRO was established as a dedicated global division in 2007. The company is a well respected global provider of MRO services to the commercial, regional, and general aviation aftermarkets. With 13 strategically placed locations around the world, AMETEK MRO is capable of servicing more than 40,000+ aircraft components and also offers new build and design programmes as well as aircraft component management services.

About Werner Aero:

Werner Aero is a global aviation aftermarket supplier to airlines, MROs, and aircraft leasing companies. The company provides comprehensive, tailored solutions to customers specialising in the sale, lease, and management of aircraft components. Werner Aero's wide range of offerings focuses on local and customised solutions. Founded in 1993, the company has maintained a consistent record of growth and success, and expansion includes the development of new facilities worldwide, allowing it to remain close to its customers and provide exceptional, personalised service. In December 2024, Werner Aero became a wholly owned subsidiary of the Sumitomo Corporation Group, strengthening its global reach and capabilities.

AviTrader MRO: Why are wheels and brakes often considered a "high-frequency, high-cost" maintenance item?

Ismael Fadili, AMETEK MRO: Wheels and brakes are high removal items due to the nature of the equipment. A very high wear rate is mixed with a high level of cycles (a tyre is changed on average every 200 cycles) and the high cost of components (tyres and carbon heat packs). It's also worth mentioning that there is a safety obligation for those critical components to be repaired or overhauled as soon as needed.

Aslihan Uçar, Werner Aero, LLC: Wheels and brakes are usually considered "high-frequency, high-cost" maintenance items because they are exposed to constant wear during every landing and taxi cycle. Unlike many other aircraft components, they need regular inspections, tyre changes, brake replacements, and overhauls within relatively short intervals. Since aircraft operate multiple flights daily, this creates a continuous maintenance demand and significant recurring costs for airlines.

What are the primary cost drivers in wheels and brakes maintenance?

Ismael Fadili, VP Sales Europe & Asia at AMETEK MRO

Aslihan Uçar: The main cost drivers in wheels and brakes maintenance include brake wear rates, tyre replacement frequency, labour expenses, spare inventory requirements, and turnaround time pressures. Additionally, factors such as aircraft utilisation, landing frequency, runway conditions, and fluctuations in raw material prices can significantly impact overall maintenance costs. Regular inspections can help minimise unexpected maintenance expenses, while effective spare parts planning can improve efficiency and reduce both downtime and costs.

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Ismael Fadili: For wheels undoubtedly the tyre is the main cost driver, for brakes and especially carbon brakes, the heat pack is the main one. Those two items can represent up to 80% of the overall cost.

How do airlines typically structure wheels and brakes maintenance (in-house vs outsourced)?

Ismael Fadili: It is a mix of fully outsourced, all in-house, and partial in-house capability (tyre change only in-house and overhaul subcontracted to third parties). It really depends on the type of airline - low-cost airlines are much in favour of outsourcing - and operational needs.

Aslihan Uçar: Airlines usually use a mix of in-house maintenance and outsourced support depending on their fleet size and operational strategy. Large carriers often keep some wheel and brake capabilities in-house to maintain better operational control and reduce turnaround times. Smaller airlines, however, tend to outsource these services to specialised MRO providers because it reduces investment in equipment, tooling, and spare inventory.

How do OEM support programmes compare to independent MRO offerings in terms of cost and flexibility?

Aslihan Uçar: OEM support programmes generally provide strong technical support, guaranteed component reliability, and access to the latest engineering updates, but they are usually more expensive and less flexible in contract terms. Independent MRO providers are often more competitive on pricing and can offer customised solutions, although the level of OEM-backed support and access to proprietary technology may be more limited.

Ismael Fadili: Wheels If we're talking about spare parts, most of the OEMs are offering a CPAL contract (Cost Per Aircraft Landing) to airlines. These enable airlines to have control of the cost especially if the maintenance is done in-house. They are also offered to airlines when the work is subcontracted to a third party though a tripartite agreement. For overall maintenance, both OEMs and MROs offer full CPAL contracts.

How do airlines determine optimal inventory levels for wheels, brakes, and tyres?

Ismael Fadili: The optimum inventory is based on cycles, geographical location, and seasonality. Different wear levels are encountered if the airline operates in a very dry and hot region versus a wet and cold one. Seasonality is a main driver of inventory optimisation as well. High temperatures increase the level of tyre wear. At ANTAVIA/AMETEK MRO we see more removals during summer than winter (in a range of +10 to +20%). As a result, airlines assess all these factors to determine what is the best level of inventory needed.

Aslihan Uçar: Airlines determine optimal inventory levels by analysing fleet size, aircraft utilisation, historical consumption rates, turnaround times, and supplier lead times. They also consider operational risk, such as AOG situations, to ensure enough spare wheels, brakes, and tires are available without creating unnecessary inventory holding costs. I think keeping the right amount of inventory is important for smooth operations. Too much inventory can increase costs, while too little inventory can cause delays.

What are the trade-offs between owning inventory versus using pooling services?

Aslihan Uçar: Owning inventory gives airlines greater operational control and immediate component availability, which can reduce delays and improve scheduling flexibility. However, it also requires high upfront capital investment and ongoing storage and management costs. Pooling services, on the other hand, reduce inventory ownership costs and provide shared access to spare components, but airlines may have less control over availability during periods of high demand.

Ismael Fadili: It much depends on the type and number of aircraft operated, the way maintenance is managed (in-house versus outsourced), and the type of operation (scheduled flights versus charter). I don't think there is a clear model for airlines as it is really based on the way the airline is operating.

Maintenance Mythbusters: "OEM Parts Are the Only Safe Option"

Does such a myth do little other than exacerbate already badly disrupted supply chains?

By David Dundas

It is impossible to overemphasise the importance of safety where the maintenance of any aircraft is concerned. It is perhaps for this reason alone that 'the safest option' will always have the greatest appeal when it comes to spare parts. However, one needs to question whether OEM parts are, by definition, the safest option, or is that simply a lazy preconception. After all, if a part is machined to the exact same specification, using the exact same material, and has received approval from the FAA, how is it less safe?

Perhaps we are being misled into believing that only OEM parts are safe because some lessors demand only OEM parts be used as replacements during MRO operations? Perhaps we are confusing what the term 'safe' refers to – do we mean mechanically reliable or are we referring to traceability? If we are going to dispel the myth regarding OEM parts being the only safe option, perhaps we need to delve a lot deeper into the issue...

The Assumption of Brand Equals Safety

Where aircraft OEM is concerned, and especially at the present time, few topics occupy the conversation space more than parts sourcing. When reliability and airworthiness are at stake, it makes perfect sense that many professionals instinctively associate safety with original equipment manufacturer (OEM) components which, unsurprisingly, has led to a widespread belief across the industry that OEM parts are the only safe option. At first glance, the assumption makes sense and feels logical as OEM parts come directly from the aircraft or engine manufacturer, carry familiar branding, and are often seen as the default choice for ensuring quality.

However, the reality of modern aviation MRO systems is far more nuanced. Safety is not determined by branding alone. There are many other factors which have to be taken into consideration, including certification, traceability, and regulatory compliance.

Aviation Parts Are Defined by Approval, Not Origin

The aviation industry operates under one of the most stringent regulatory frameworks in the world. Every component installed on an aircraft must meet strict airworthiness requirements, regardless of whether it comes from an OEM, an approved alternative manufacturer, or a certified repair organisation. What is important to understand here is that regulatory authorities such as the EASA and the FAA do not define safety based on who produced the part, but on whether the

part is properly approved, documented, and maintained within the established system of continuing airworthiness.

Approved alternatives such as Parts Manufacturer Approval (PMA) components, Designated Engineering Representative (DER) repairs, and certified used serviceable material (USM) exist precisely because the regulatory system allows for the use of safe, controlled options beyond OEM supply, providing they meet the same stringent parameters. These alternatives are not second-rate options; they have a legitimate place within aviation's safety framework.

The Role of PMA Parts in Modern Aircraft Maintenance

The exact nature of PMA parts are often misunderstood outside technical procurement circles. A PMA component is not a cheap, second-rate unregulated copy of an existing OEM part. It is a part that has obtained FAA approval, clearly demonstrating that it meets the same airworthiness standards as the original. In many cases, PMA parts are produced by highly specialized manufacturers with the most robust of quality systems, and these parts may even incorporate design improvements based on operational experience.

For airlines and MROs, PMA parts can provide reliable alternatives, reduce costs, and improve availability, particularly when OEM supply chains are constrained. The key is not whether the part is OEM-branded, but whether it is properly certified, supported, and traceable.

DER Repairs and Engineering-Approved Alternatives

Another important area of misconception involves DER repairs. In situations where OEM repair solutions are limited, engineering-approved repairs can restore components safely under strict regulatory oversight. DER-authorised repairs are developed through approved engineering processes, validated for structural integrity and performance, and documented in compliance with regulatory requirements.

These repair pathways are becoming increasingly important in an industry which is facing problematic parts shortages, long lead times, and rising maintenance costs. When properly managed, DER repairs are not compromises and should not be viewed as such—they are controlled engineering solutions that maintain airworthiness while supporting fleet continuity.

Used Serviceable Material and the Circular Economy

The aviation aftermarket has also seen significant growth in the use of certified used serviceable material (USM). USM parts, often sourced from teardown aircraft, are inspected, recertified, and reintroduced into the supply chain with full documentation and traceability. In a time which is being dogged by supply chain problems, USM has become an essential part of the global maintenance ecosystem and is responsible for keeping many, many aircraft in the air.

When properly certified, USM provides safe, cost-effective solutions while supporting circular aviation practices. Again, the determining factor is not whether the part is new and OEM-


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supplied, but whether it carries proper release documentation and traceability. Beyond this, you also have to understand that many USM parts from teardowns are also OEM parts and therefore fit for purpose.

Why the Myth Persists

The belief that only OEM parts are safe often persists because OEM branding creates a form of psychological reassurance. Operators frequently assume that an original manufacturer's part must automatically be superior to any alternative, while those alternatives are perceived as second-trate. Additionally, OEMs have increasingly expanded their aftermarket influence, positioning themselves as the primary providers of support and spares.

However, the aviation regulatory system exists precisely to ensure that safety is maintained across all approved supply channels. The myth also persists because the penalties for improper sourcing are severe, and organisations naturally gravitate toward the most familiar option. Yet familiarity should not be confused with exclusivity.

The Real Safety Issue: Traceability and Documentation

Surely the true safety determinant in parts sourcing is not whether a part is an OEM one, but whether it has full and accurate traceability. The greatest risks arise from poor traceability resulting from incomplete documentation, counterfeit components, or unapproved supply chains. A genuine OEM part without proper paperwork is not acceptable, just as an approved PMA part with full traceability is safe. Airworthiness depends on documentation, certification, and quality assurance, not simply on origin.

For MROs, the challenge is ensuring robust procurement processes, supplier auditing, and compliance with regulatory release standards.

Conclusion: Safety Comes From Approval, Not Branding

The myth that OEM parts are the only safe option is an understandable oversimplification, but it does not reflect the realities of modern aviation maintenance. The industry's safety framework is built around certification, regulatory oversight, and traceability, not brand identity. Approved alternatives such as PMA parts, DER repairs, and certified USM now play an increasingly important role in keeping fleets operational, MRO cost-effective, and enterprises sustainable.

Ultimately, safety in aircraft maintenance does not rely on choosing OEM by default. It is about choosing parts that are properly approved, correctly documented, and installed within a disciplined airworthiness system. In aviation, the safest option is not defined by the logo on the component, but by the integrity of the process behind it.

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Paul McElhinney

StandardAero's Board of Directors has appointed **Paul McElhinney**, a 35-year aerospace industry veteran and StandardAero's current Lead Independent Director, as Chief Executive Officer (CEO). He will succeed **Russel Ford** who will retire after 13 years leading the company and a 45-year career in the aerospace industry. McElhinney will assume the role of CEO on October 1, 2026. To ensure a smooth transition, Ford will work closely with McElhinney in the coming months and will remain Executive Chairman of StandardAero's Board until December 31, 2026. McElhinney will then take on the role of Chairman from January 1, 2027, while Ford will continue to serve as a member of the Board. Since becoming CEO in 2013, Ford has overseen a period of significant growth and transformation for StandardAero. During his tenure, annual revenue increased from US$1.6 billion to more than US$6 billion in 2025. The company also expanded its global presence, broadened its service capabilities, improved profitability and strengthened relationships with operators and original equipment manufacturers worldwide. Ford also led StandardAero through its successful initial public offering in 2024, positioning the company for continued long-term growth. Since listing, StandardAero has delivered strong operational and financial results, including sustained revenue growth, higher earnings and an expanding backlog. McElhinney brings extensive leadership experience across the aerospace and industrial sectors. He currently serves as Senior Operating Partner and co-Head of the Portfolio Strategy and Optimisation Group at AE Industrial Partners and has been a member of StandardAero's Board since 2019. Before joining AE Industrial Partners, McElhinney held several senior leadership roles at General Electric during a 30-year career with the company. He served as President and CEO of GE Power Services, a US$15 billion power generation aftermarket business, and as President and CEO of GE Aviation Services, where he more than doubled the division's backlog to over US$100 billion. He also held General Counsel and Business Development positions at GE Aviation and GE Capital Aviation Services.

Outgoing CEO Nikolaj Jacobsen (l) and new CEO Mike Humphreys (r)

TP Aerospace has named **Mike Humphreys** as Chief Executive Officer (CEO), effective June 1, 2026. He succeeds **Nikolaj Jacobsen** who has held the role of CEO since 2022. Humphreys joins the executive role after serving as a non-executive director of TP Aerospace, where he played a key role in shaping the company's current strategy. In his new position, he will focus on strengthening commercial execution and supporting the company's next phase of growth. He brings more than 35 years of experience in the commercial aviation aftermarket, having held senior leadership and C-suite positions at several industry organisations, including FLS Aerospace, SR Technics and, most recently, Airinmar, where he served as President. **Flemming Jensen**, Chairman of the Board, welcomed the appointment, highlighting Humphreys' extensive leadership experience and proven track record of delivering commercial growth. "I am very pleased that Mike has agreed to take on the role of CEO of TP Aerospace," said Jensen. "He brings significant experience from previous chief executive positions, where he demonstrated a strong focus on commercial execution. We believe these skills will be highly valuable as TP Aerospace builds on the work undertaken to prepare the business for future growth." The appointment marks the next stage in TP Aerospace's development as the company looks to expand its market position and capitalise on new growth opportunities within the aviation sector.

Jeffrey Lam

ST Engineering has disclosed that **Jeffrey Lam** will assume the role of Group Deputy Chief Executive Officer from June 1, 2026. He will step down from his current positions as Group Chief Operating Officer (Operations Excellence) and President of Commercial Aerospace. In his new capacity, Lam will continue reporting to **Vincent Chong**, Group President and Chief Executive Officer, and will retain his seat on the Group Executive Committee. Lam brings more than two decades of leadership experience across the aerospace sector and has played a pivotal role in advancing the division's operational performance,

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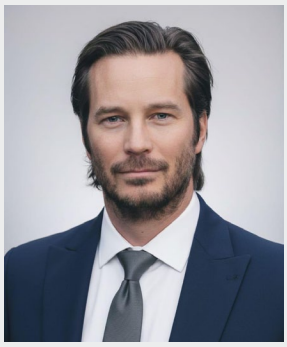
customer partnerships and growth initiatives. His deep industry expertise and strong track record in driving execution position him well to lead the business through its next phase of development and global expansion. ST Engineering continues to grow its global footprint, supported by a strong order book and disciplined strategy execution. As the Group expands, the wider scope of its businesses calls for sharper Group-level focus to improve alignment and unlock synergies across the organisation. As Deputy CEO, Lam will support the Group CEO in driving key enterprise priorities, realising Group-wide synergies and enhancing organisational excellence. He will also oversee the Commercial Aerospace business at the management level. Concurrently, the Group will appoint **Kevin Chow**, currently Head of Aerostructures and Systems at Commercial Aerospace, to succeed Lam as President of Commercial Aerospace.

Jean-Christophe Gallagher

Ontic has appointed **Jean-Christophe (JC) Gallagher** as its new Chief Executive Officer as the aerospace specialist continues a period of sustained international growth across the civil and military aviation sectors.Gallagher succeeds **Gareth Hall**, who has led Ontic for more than a decade and overseen a major expansion of the business during his tenure. Hall will move into the role of Executive Chairman, where he will continue to shape the company's long-term strategic direction and maintain key industry and customer relationships. The leadership transition comes as Ontic scales its global operations and expands its portfolio to meet rising customer demand. The company, which specialises in sustaining and advancing aircraft systems throughout their operational life, said its core mission of supporting "a lifetime of flight" remains central to its strategy. Gallagher joins Ontic after a 20-year career with Bombardier, where he most recently served as executive vice president of Aircraft Sales and Defense. During his time at the Canadian aerospace manufacturer, he built a strong reputation for driving commercial performance, managing large-scale organisational growth and fostering collaborative corporate cultures. Ontic believes his experience across both commercial and defence aviation markets will strengthen the company's leadership team as it continues to grow internationally and support increasingly complex customer requirements. The handover process will take place gradually over the coming months, with Hall and Gallagher working closely together to ensure continuity across the organisation and maintain momentum during the transition period. Ontic said the arrangement is designed to provide uninterrupted support for customers and partners while reinforcing its long-term commitment to fleet availability and operational longevity. Under Hall's leadership, Ontic significantly expanded its footprint and strengthened its position as a leading supplier of critical aircraft parts and support solutions for ageing and in-service fleets. The company now aims to build on that momentum through further operational scaling, portfolio growth and enhanced customer support capabilities. Gallagher's appointment marks the next phase in Ontic's development strategy as the company positions itself to meet growing demand across the global aerospace market while continuing to focus on reliability, lifecycle support and long-term fleet sustainment.



Christoffer Creutz

AJW Middle East has named **Christoffer Creutz** as Chief Commercial Officer (CCO), strengthening its commercial leadership as the business continues to expand across the region. Creutz joins the company at a pivotal stage in its growth. AJW Middle East leverages established vendor supply chain partnerships and extensive access to global inventory to deliver cost savings and operational efficiency for customers throughout the Middle East. The appointment supports the company's continued expansion in spare parts trading, asset leasing, teardown management and inventory optimisation services. With more than 25 years' experience in senior aviation leadership roles, Creutz brings extensive expertise across MRO, parts trading and asset management. He began his career with Lufthansa Technik, gaining an early foundation in large-scale aftermarket support, before joining Inflite The Jet Centre as Managing Director. During his tenure, the business was one of Europe's largest independent authorised Embraer service centres, where he led its line, base and component maintenance operations. Creutz later founded and successfully exited his own aviation venture before moving into senior commercial and CEO-level positions within international MRO and asset management businesses. His responsibilities have included P&L leadership across the Middle East, Asia and the Americas. His track record combines broad cross-sector aviation experience with entrepreneurial agility and a proven ability to drive revenue growth, operational transformation and international market expansion.

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