

IAE CELEBRATES 40 YEARS OF INNOVATION WITH THE VERSATILE AND PROVEN V2500 ENGINE

News / Manufacturer



Pratt & Whitney celebrated the 40th anniversary of the establishment of IAE International Aero Engines AG, a multinational consortium comprised of shareholders that also include Pratt & Whitney Aero Engines International GmbH, Japanese Aero Engines Corporation and MTU Aero Engines. The launch of the successful joint venture in March of 1983 leveraged diverse engineering expertise and advanced technology from across the party companies to develop the cleaner, quieter, more fuel efficient V2500, an engine that would lead the single-aisle market into the new millennium and continues to power nearly 3,500 aircraft globally.

The continuous improvement of the versatile V2500 today delivers reliability, efficient power and performance for approximately 150 commercial, cargo, and military operators in 80 countries. In total, more than 7,800 have been produced since entry into service, collectively powering more than 135 million flights and more than 255 million engine flight hours. Approved for operation on

50% sustainable aviation fuel (SAF), the efficiency of V2500 will help the aviation industry meet its goal of net-zero CO2 emissions by 2050.

Earl Exum, president of IAE and vice president, Mature Commercial Engines, Pratt & Whitney, commented: "The V2500 is a workhorse of the aviation industry and has grown into one of the most successful commercial aerospace programs of all time. The V2500 wouldn't be the triumph it is without our IAE collaborators, customers, and suppliers. With the IAE collaboration agreement extension to 2045 and a substantial fleet of V2500s in service today, this joint venture has secured its standing as a global aviation leader for decades to come."

Just one year after IAE was formed, the V2500 won its position on the Airbus A320ceo family of aircraft and later entered into service with launch customer Adria Airlines in 1989. The V2500 now powers 60% of the global in-service A321ceo fleet, with an average fleet age of only 12.8 years. The engine also powered 116 Boeing MD-90 aircraft, entering service on that type with Delta Airlines in 1995.

Philippe Mhun, Executive Vice President Programmes & Services, Airbus, said: "The V2500 has long powered Airbus aircraft. The engines reliably transport millions of passengers each year. We extend our congratulations to IAE and the party companies for 40 years of dedicated service to the V2500 and the aircraft that it powers."

In the spirit of rigorous continuous innovation and improvement, IAE released multiple engine enhancements between 1993 and 2011 — the A5, D5, SelectOne™, SelectTwo™, and E5 variants – with each subsequent enhancement offering reliability, fuel, noise and other performance benefits. The V2500 delivers a 3% fuel efficiency advantage over the competing engine and holds a dispatch reliability rate of 99.97%.

The V2500-E5 variant remains in production for the Embraer C-390 Millennium, which entered service with the Brazilian Air Force in 2019. In addition to Brazil, the aircraft has been acquired by Portugal and Hungary, both NATO nations. In June 2022, the Netherlands Ministry to Defense announced the selection of a fleet of five C-390 Millennium aircraft.

The V2500-E5 powerplant provides 31,000 pounds of thrust and demonstrates the engine's capability to support a variety of missions, including cargo and troop transport, aerial refueling, aerial firefighting, search and rescue, medical evacuation, and humanitarian disaster relief.

"As a medium-weight, multi-mission tactical aircraft, the V2500-E5-powered C-390 provides versatility and dependability, even in challenging environments," says Bosco da Costa Junior, President & CEO, Embraer Defense & Security. "The ability to be rapidly reconfigured and its capability to operate on short, unpaved or damaged runways makes it extremely useful for a variety of missions. We're excited to see the program continue to grow in the coming years."

More recently, the V2500 [powered the first A321](#) and A320 passenger-to-freighter conversions, with more slated to enter service in the coming years. With custom service offerings tailored to the lower-cycle cargo market, and a fuel and payload-range advantage over the competing engine, the V2500-powered A320ceo family of converted cargo aircraft offer a strong value proposition to cargo carriers around the world.

Around 70% of V2500-powered aircraft are under 15 years old and about one-third of engines are still on first run. The V2500 engine is backed by an established global network of 17 facilities for maintenance, repair and overhaul (MRO), including nine IAE partner facilities. Pratt & Whitney and IAE have been enhancing services for the V2500 engine, including LLP solutions, new and

serviceable material programs, engine swaps and more, which can be tailored and customized to support the unique requirements of our customers. With long-term agreements, fixed price services and transactional solutions, an increasing variety of worksopes and payment options are available to V2500 operators.

Over the past 40 years, IAE has accomplished almost every goal it set for itself and has nearly produced the 8,000 engines originally predicted by IAE in 1983. Today, IAE is entering a new and exciting era with its party companies, which are positioned to best serve customers by allowing more flexible offerings to the narrowbody segment.

10 MARCH 2023

ARTICLE LINK:

<https://50skyshades.com/index.php/news/manufacturer/iae-celebrates-40-years-of-innovation-with-the-versatile-and-proven-v2500-engine>