

AIN 2026 Product Support Survey: Engines

AIN readers rate business aviation engine OEMs' aftermarket support

BY CURT EPSTEIN



The BR700 series led the turbofan model-specific ratings, shining in multiple areas of support.

Engines are without doubt the most critical component on an aircraft. They unlock the aircraft's potential as a means of fast, efficient transportation, and without them, a business airplane is just a static, expensive piece of aeronautical artwork.

Part 3 of AIN's annual Product Support Survey asked our readers to rate their engine reliability and the support they receive from the manufacturers.

In this year's results, Rolls-Royce rose to the top of the turbofan manufacturers with a score of 8.54, while GE Aerospace, which had held that spot for the past few years, moved to third place (8.39). Splitting that

narrow gap was Williams International, which drew a rating of 8.41, while Pratt & Whitney (7.91) and Honeywell Aerospace (7.90) filled out the remainder of the roster—not too far off the top scores.

Among those that garnered enough ratings to meet the reportable threshold, the top three ranked jet engines in this year's survey were Rolls-Royce's BR700 series (8.61), followed by GE's Passport (8.54) and CF34 (8.40). They were rated across 10 categories.

In the turboprop segment, Honeywell's TPE331 earned the overall highest score (8.71) among all engine models in this year's survey, leapfrogging

Pratt & Whitney's PT6A (8.23).

"Service remains a major driver of platform lifecycle success," said Malcolm Fleming, Honeywell Aerospace's v-p of global technical operations. "Operators strongly consider high-quality OEM support when evaluating engine performance and long-term ownership cost."

One of the perpetual gripes among AIN's annual survey respondents is the cost of parts, and that held true this year, with the category once again seeing the lowest high score among all 10 of the survey categories. "We have also observed rising costs, driven primarily by suppliers increasing prices in

response to broader global economic pressures,” said Lindsey Gillen, v-p of sales and marketing for business aviation services at Rolls-Royce. “Additionally, there is a notable shift from fully global supply chains towards more local or regional sourcing, particularly within the Western hemisphere.”

Yet manufacturers face several hurdles when it comes to optimizing their performance. “The industry continues to operate in an environment of strong demand while navigating supply-chain constraints, workforce availability, and the need to expand maintenance capacity,” said Anthony Rossi, Pratt & Whitney Canada’s v-p of customer service. “Although conditions have improved, operators continue to expect faster turnaround times, greater flexibility, and higher levels of support.”

“One of the key issues facing our industry is the shortage of skilled labor needed to produce castings, forgings, and machined components, which, coupled with high demand, puts significant pressure on the supply base and overall throughput,” explained Honeywell’s Fleming, adding this constraint is driving extended lead times and continued supply-chain volatility. “To mitigate this, we are forecasting requirements further beyond standard lead times, expanding repair development to reduce reliance on new-build material, and increasing supplier-development efforts to stabilize flow and improve capacity.”

Justin Kral, head of GE Aerospace’s business aviation customer support and services, noted the labor shortage is not just on the production side. “The shortage of

A&P technicians and retiring expertise gap [less than 15 years’ experience and greater than 25 years’ experience] continues to be a key challenge,” he said, adding a major driver is a lack of awareness of job needs and opportunities in business aviation. “Organizations like NBAA/EBAA/NATA are critical to spreading awareness.”

This has led to OEMs assessing the means by which they recruit and retain talent. “We invest heavily in technical training, professional development, and ongoing career opportunities, which has built a highly skilled, long-tenured workforce, a key part of the value we deliver to operators,” said Williams International v-p of customer experience Steve Shettler. “Exceptional service is absolutely central to long-term customer confidence, and it directly influences future sales.”

Category & Overall Average Ratings for Aircraft Engines	Overall Average 2026	Factory Owned Service Centers	Authorized Service Centers	Cost per Hour Programs	Parts Availability	Cost of Parts	AOG Response	Warranty Fulfillment	Technical Manuals	Technical Reps	Overall Engine Reliability
Turbofan Engines											
Rolls-Royce	8.54	8.83	8.58	7.77	8.70	7.41	8.63	8.93	8.16	8.84	9.32
Williams International	8.41	8.95	9.40	7.33	8.52	7.37	8.31	8.55	8.28	8.12	9.27
GE Aerospace	8.39	8.70	8.06	7.51	8.25	7.00	8.43	8.62	8.72	8.80	9.36
Pratt & Whitney	7.91	7.95	9.08	7.42	7.27	6.34	7.71	8.13	8.63	8.40	8.43
Honeywell Aerospace	7.90	8.18	8.50	7.39	7.26	6.75	7.83	8.11	7.88	7.77	8.95
Turboprop Engines											
Pratt & Whitney	8.23	8.58	8.66	7.58	7.95	6.35	7.68	8.78	8.33	8.85	9.48
Turboprop Engines (for out-of-production turboprop aircraft)											
Honeywell Aerospace	8.71	9.27	9.05	8.78	8.80	6.29	9.20	7.78	9.00	9.12	9.56
Turboshaft Engines											
Pratt & Whitney	8.31	8.80	7.50	7.64	8.12	6.84	7.77	8.52	8.78	8.81	9.42

SURVEY RULES AND METHODOLOGY

AIN's annual Product Support Survey aims to quantify and rate through statistical analysis the product support functions of aircraft manufacturers over the past year. The survey, whose respondents include operators of business jets, pressurized turboprops, and turbine-powered helicopters, endeavors to encourage continuous improvement in aircraft product support throughout the industry.

SURVEY TOOL

For the fourth year, AIN conducted the survey via a questionnaire developed in partnership with Rolland Vincent Associates, a Texas-based consultancy focused on aviation market research, strategy, and forecasting. Designed

to provide improved ease of use and to encourage more participants to complete the entire questionnaire, the English-language survey tool includes clear language and imagery around the categories and evaluation scale. The survey asks respondents to evaluate one full aircraft at a time, including airframe, engines, avionics, and cabin management systems/in-flight entertainment systems, as well as airborne connectivity systems.

METHODOLOGY

AIN emailed qualified readers from its list of subscribers a link to a password-protected survey website active from late February to May 31, 2026. It asked respondents to rate individual aircraft and provide the tail number, aircraft age, primary region of service, and whether they

used factory-owned or authorized service centers, or both. The survey's engines section also asked respondents to rate, on a scale from 1 to 10, the quality of service they received during the previous 12 months in the following categories: Factory Owned Service Centers; Authorized Service Centers; Cost Per Hour Program; Parts Availability; Cost of Parts; AOG Response; Warranty Fulfillment; Technical Manuals; Technical Reps; and Overall Engine Reliability.

THE RESULTS

In total, 710 unique respondents representing 1,152 aircraft from 62 countries completed the survey. We only included results of engine manufacturers/models that met the minimum threshold of ratings. Rolland Vincent Associates reviewed the Product Support Survey data to ensure accuracy.

ROLLS-ROYCE

Taking the top position this year in the AIN Product Support Survey: Engines was Rolls-Royce. With a rise of more than a tenth of a point from last year's results, the manufacturer climbed from third place to lead the turbofan engine manufacturers with an overall score of 8.54. It led in more than half of the individual survey categories as well, with a top score coming in the warranty fulfillment category (8.93).

Helping propel these scores was its BR700 series powering Gulfstream and Bombardier long-range models with an 8.61 rating and top scores in a handful of the categories.

"Right now, we have more than 8,100 engines in service, covering six different engine types, some of which have been flying for up to 40 years," explained Rolls-Royce's Gillen. "That level of diversity from the Tay to the Pearl 700 really requires us to offer a broad range of support options."

In the cost per hour category, Rolls-Royce led the pack with its CorporateCare Enhanced program earning a score of 7.77. "We have made strong commitments to



Rolls-Royce climbed to the top of this year's product support chart with an 8.54 overall average.

our CorporateCare customers, who count on us for unmatched aircraft availability, quick service, and world-class support,"

Gillen told AIN, adding that with more than 250 lease engines and nacelle components available to support them, resilience

is the company's major focus this year. "We are taking a close look at every aspect of our services for each product to make sure we always have the capacity and expertise to deliver the best possible support—no matter which engine, and no matter when."

That commitment led to the OEM claiming the top slot in the AOG response category as well (8.63). Rolls-Royce operates a dedicated, 24/7 business aviation aircraft availability center that delivers an average of less than 24-hour AOG return to service time and an averted missed trip rate of over 99% worldwide.

It has 10 strategically located part depots around the world, the latest being a 10,000-sq-ft AOG support location in New York to support the company's U.S. East Coast clients.

That resonated among AIN's survey respondents, who gave the engine maker top marks in parts availability (8.70). "We are facing some challenges, particularly regarding some older parts where demand is lower and several suppliers have exited

the market," admitted Gillen, who added the company has invested more than a billion dollars in its global services network to ensure parts availability and rapid response.

While the cost of parts category is never one to spur enthusiasm among AIN's respondents, Rolls landed on the top of the heap in this year's survey with a score of 7.41. "We have observed rising costs, driven primarily by suppliers increasing prices in response to broader global economic pressures," said Gillen.

With 25 dedicated customer managers located around the world, Rolls-Royce also earned the top score (8.84) among turbofan manufacturers for its technical representatives. "We sell aircraft availability," Gillen told AIN. "Service is absolutely mission critical; being available, equipped, and prepared whenever or wherever a customer needs support."

Among its latest innovations is the integration of the Engine Health and Vibration Monitoring Unit into its Pearl family of powerplants.

"While the name might be clunky, this piece of technology is capable of delivering predictive analytics on the engine and even on line replaceable units," explained Gillen. "It allows us to monitor thousands of different parameters in real time, like heat, vibration, and even the cycle times and current draws of various components." That, she said, gives it the ability to keep an eye not only on engine health, but also to predict issues before they happen, both at the engine and component level.

In the factory owned service center category, the company tallied a strong 8.83 score this year. "Our Rolls-Royce MRO facilities handle about 300 engine repairs each year, which represents about 90% of all shop visits," said Gillen. "The remaining 10% is managed by our network of trusted partners—authorized and independent service centers that we have carefully selected for their quality standards and capabilities." Those outside shops received a score of 8.58.

WILLIAMS INTERNATIONAL

Having earned a second-place finish in last year's Product Support Survey, Pontiac, Michigan-based Williams International maintained that position this year, despite its overall score dropping from 8.78 in the 2025 edition to 8.41 in the latest edition.

"Williams International currently supports a fleet that will exceed 8,500 engines this year, with more than 23 million total flight hours," noted Williams' Shettler, describing that as a testament to the scale of its global customer base as well as its product reliability. "As our fleet continues to expand, we remain committed to delivering industry-leading value, affordability, and performance for operators worldwide."

As its FJ44 engine fleet has grown, so too has Williams' engine service business,



Williams International's second-place rating reflects investments in personnel and parts.

which has more than doubled in the last decade. That is a trend the company expects to continue.

“Over the past year, we have made significant investments to further strengthen customer support in ways that enhance accessibility, responsiveness, and cost predictability,” Shettler told **AIN**. “We expanded our customer service team to provide owners and operators with more direct access to highly trained representatives, ensuring faster, more personalized assistance. We also improved our spare parts logistics operations through enhanced inventory tracking and faster shipping options, reducing turnaround times and helping ensure aircraft remain mission ready.”

Indeed, **AIN**’s survey respondents appreciated that effort, giving the company an 8.52 score for the parts availability category, the second-highest total among the jet engine manufacturers.

Response on the authorized service center category indicated a strong degree of satisfaction among **AIN**’s readers.

“For everyday line level maintenance, we rely on our authorized service centers—all of which receive comprehensive training from us,” said Shettler. “When maintenance goes beyond line level, our repair station takes the lead and often works hand in hand with those centers to complete more complex jobs right at the aircraft’s location.”

That facility earned the highest score among turbofan makers in the factory

owned service centers category (8.95) in this year’s survey.

Last year the company began construction on what will be a more than \$1 billion aviation engine manufacturing plant at the Shoal River Industrial Park in Crestview, Florida. The first 250,000 sq ft of what will eventually be a 600,000-sq-ft facility is slated to open by the end of this year.

At the groundbreaking last November, Williams said the facility would enable “the future growth of new product lines.”

This is on top of a recent addition at the company’s Ogden, Utah, location, and a planned \$200 million expansion of the development and testing center at its Pontiac headquarters.

GE AEROSPACE

After placing at the top of the list of business jet engine manufacturers last year with an overall average score of 8.81, GE

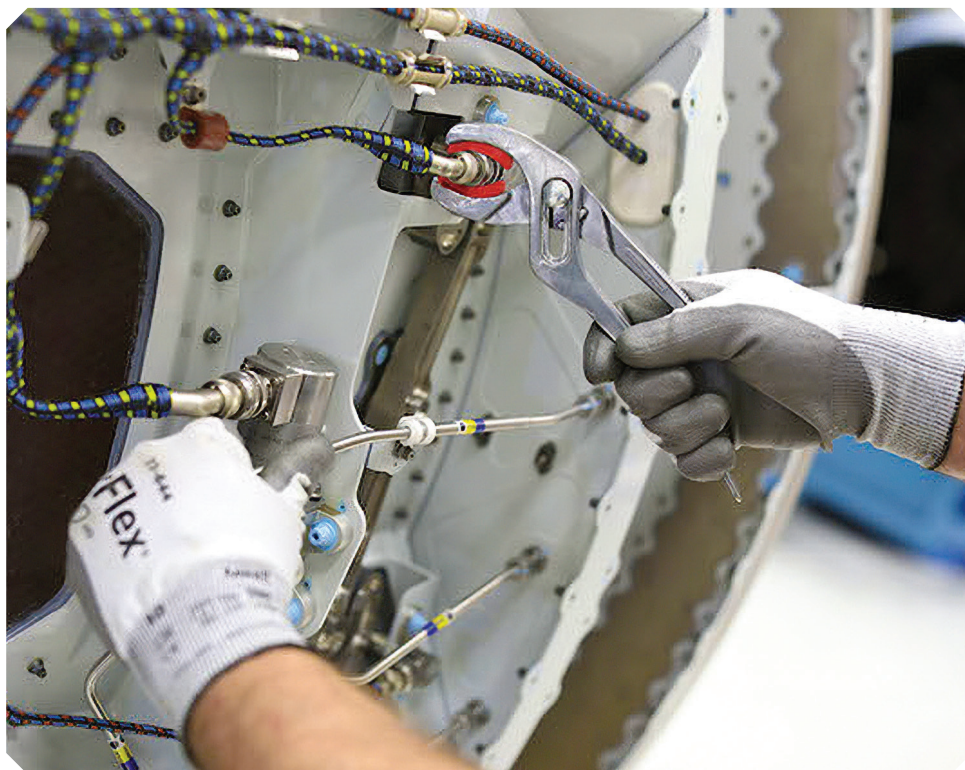
Aerospace saw some erosion, placing third this year, with its score down more than four-tenths of a point (8.39). It did,

however, receive the highest score (9.36) among turbofan OEMs in the overall engine reliability category.

Broken down by engine type, **AIN**’s survey respondents ranked the Ohio-based manufacturer’s Passport (as used on the Bombardier Global 7500 and 8000) and CF34 engines (which power Bombardier’s Challenger 600 series) in the turbofan category. The latter earned the highest rating on overall engine reliability this year among the turbofan engines, tallying a score of 9.39, and narrowly edging out its Passport sibling (9.22) and the Rolls-Royce BR700 series among the reported engines, while also nabbing the top score for technical manuals (8.69).

“[We] continue to build and refine proactive analytics that use thousands of engine parameters to predict hardware failures before they occur,” explained GE Aerospace’s Kral. “This turns diagnostics from reactive to prognostic and proactive.”

While the company scored the lowest (8.06) among jet engine manufacturers in the authorized service center category,



GE Aerospace has added more traveling technicians to strengthen mobile repair support.

it is working with its network to increase its “in-house” engine maintenance capacity and minimize aircraft downtime spent waiting for GE technicians to travel to the location. To that end, it is also expanding the availability of its mobile repair teams for complicated tasks involving OEM expertise, with a 20% increase in traveling engine technicians over the past 18 months.

The Passport engine earned the highest score (8.74) in AOG response, as well as technical representatives (9.05) for the turbofan segment. “GE Aerospace constantly assesses proximity of product and

customer support to high-traffic locations where our business aviation customers fly the most,” said Kral.

To meet that demand, the company recently added new field support personnel in the well-connected hub of Singapore to improve its access to the Asia-Pacific region as well as place them near several critical service centers including Bombardier’s repair facility at Seletar Aerospace Park. As well, it boosted its regional leadership in the Eastern coast of the U.S. to bolster support for growing demand in northern and southeastern business aviation hubs.

AIN’s readers gave the manufacturer’s OnPoint maintenance program a score of 7.51, good for second place in the cost per hour programs category. “The combination of world-class product performance, best-in-class OEM support, and the security of our comprehensive OnPoint engine maintenance program has created an order backlog with our trusted airframe partners with the fleet projected to triple in size over the next 10 years,” Kral told AIN.

In 2024, the engine maker became a standalone company when General Electric divided itself into three separate businesses.

PRATT & WHITNEY

Pratt & Whitney produces engines for the private jet and turboprop segments through its subsidiary Pratt & Whitney Canada. For the former engine segment, it earned an overall average score of 7.91 from AIN’s readers, while its turboprop

engines—led by the ubiquitous PT6 family—fared better at 8.23 and turboshafts at 8.31.

“The number of P&WC engines in service increased from 62,870 at the end of 2015 to 70,900 at the end of 2025,” said Pratt &

Whitney’s Rossi, adding that over the past two years the OEM has made significant investments in its global MRO network to expand capacity, reduce turnaround times and better support its growing fleet.

The company recently announced a C\$275 million investment to modernize its largest manufacturing plant in Longueuil, Quebec. Improvements will include the addition of automated production lines, modernized machinery, and cutting-edge digital processes. These enhancements will drive greater efficiency, precision, and industrial capacity.

In rating the company’s service facilities, AIN’s survey respondents gave P&WC’s authorized service centers a score of 9.08, the second highest in the segment. “Our global customer service network is a key competitive advantage,” said Rossi. “Beyond the engine itself, customers benefit from a worldwide support organization that helps maximize aircraft availability, reduce downtime, and deliver consistent service wherever they operate.”

On the other side of the coin, however, its factory owned service centers earned a 7.95, the lowest among the turbojet makers this year, although its turboprop rating was much higher at 8.58. “Most recently,



Pratt & Whitney is assigning high priority to improving parts availability.

we expanded our Singapore facility to introduce PT6C-67C heavy MRO services, supported by a new modular test cell, and added full overhaul capability for the PW127XT,” Rossi explained. “By combining digital solutions, specialized tooling and expanded regional capabilities, we are bringing more comprehensive support closer to customers and helping improve turnaround times.”

For the parts availability category, the OEM landed near the bottom of the ratings with a 7.27 score. “At Pratt & Whitney Canada, improving parts availability remains one of our highest priorities,” Rossi told AIN. “We’ve strengthened our distribution

network and inventory strategy, increased available inventory across our global network, and continue working closely with suppliers to enhance responsiveness and delivery performance.”

Broken down by segment, on the turbofan side, AIN’s survey respondents were not impressed with the cost of the manufacturer’s parts, handing it a 6.34, the lowest satisfaction score in the segment. The company is working to give its customers other options. “We’ve expanded our repair development activities and the capabilities of our component repair and overhaul business group to improve the availability and accessibility of repaired parts,”

Rossi noted. “This approach reduces the demand for new parts by providing operators with the option to exchange and use repaired components, which can also decrease costs for our customers.”

In the engine-specific segment, P&WC’s PT6 turboprop family earned a score of 9.40 for its overall engine reliability in this year’s survey, second among all individual engines reported.

Warranty fulfillment for the PT6 also was near the top of those engine models reported at 8.79. However, the respondents also expressed concern with the cost of parts, giving it nearly the same score in the category (6.36) as its turbofan siblings.

Category & Overall Average Ratings for Aircraft Engines	Engine Model	Overall Average 2026	Factory Owned Service Centers	Authorized Service Centers	Cost per Hour Programs	Parts Availability	Cost of Parts	AOG Response	Warranty Fulfillment	Technical Manuals	Technical Reps	Overall Engine Reliability
Turbofan Engines												
Rolls-Royce	BR700 series	8.61	8.76	8.80	7.95	8.79	7.54	8.73	8.95	8.16	8.91	9.36
GE Aerospace	Passport	8.54	8.59	7.69	7.60	8.49	7.41	8.74	8.85	8.64	9.05	9.22
GE Aerospace	CF34	8.40	8.65	8.02	7.59	8.17	7.23	8.37	8.69	8.69	8.81	9.39
Honeywell Aerospace	TFE731	8.01	8.03	8.55	7.22	7.26	7.27	8.17	8.45	8.16	8.07	9.10
Honeywell Aerospace	HTF7000	7.85	8.31	8.33	7.37	7.32	6.86	7.51	8.01	7.75	7.74	8.96
Pratt & Whitney	PW300 series	7.64	7.50	9.05	7.36	6.78	6.39	7.37	7.89	8.48	7.84	8.17
Williams International	FJ44	8.38	8.89	9.50	7.60	8.39	7.56	8.18	8.46	8.27	8.11	9.03
Turboprop/Turboshaft Engines												
Honeywell	TPE331	8.71	9.27	9.05	8.78	8.80	6.29	9.20	7.78	9.00	9.12	9.56
Pratt & Whitney	PT6A (turboprop)	8.23	8.59	8.68	7.60	7.95	6.36	7.71	8.79	8.32	8.86	9.40

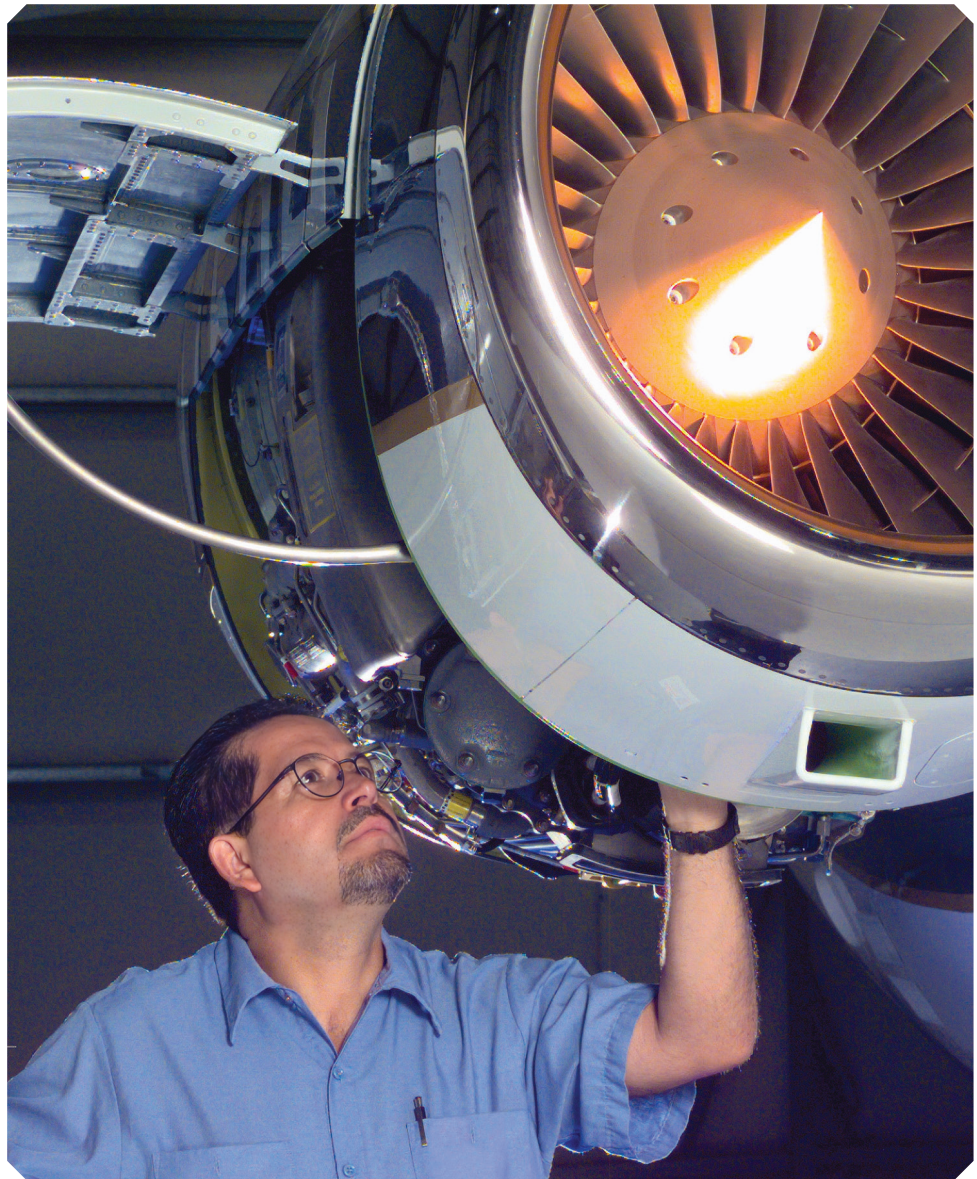
HONEYWELL AEROSPACE

On June 29, Honeywell Aerospace was spun off from its parent organization to become a standalone company with exposure in the engine manufacturing, airborne connectivity, components, and avionics arenas. “Over the past decade, the overall Honeywell Aerospace business has nearly doubled in size, representing the trust our customers have in us,” said Malcolm Fleming, the company’s v-p of global technical operations. “This growth is particularly noteworthy for our engines business because it was achieved while focusing on improvements that increase operator time on wing, including initiatives that can extend scheduled maintenance intervals for both the TFE and HTF models of engines by years, in some cases.”

In the third part of this year’s **AIN** Product Support Survey covering support for aircraft powerplants, the engine maker saw the largest year-over-year overall score increase among the manufacturers, with its score of 7.90 landing just a shade behind Pratt & Whitney in the turbofan segment. Its HTF engines—which power the Bombardier Challenger 300 family including the Challenger 3500, and the TFE, as equipped on legacy Dassault Falcons, Learjets, some Cessna Citations, and Hawkers—collectively received their highest rating (8.95) in overall engine reliability.

The manufacturer’s newest investment is Ensemble, a digital engine-monitoring intelligence suite that is available exclusively to subscribers of its cost-per-hour maintenance service plan.

“The platform delivers data downloads through Wi-Fi, analyzed by machine learning to help flag engine trends that require attention before they may cause unscheduled maintenance events,” Fleming said, adding the goal is to extend dispatch reliability for HTF and TFE engines. “As the machine learning and large language models evolve, we are actively releasing new



Machine learning is helping Honeywell Aerospace find and fix problems proactively.

capability several times a year aimed at improving mission readiness and mission assurance. Our pursuit is to continue building a transformative technology platform that enables a near real-time engine health monitoring and maintenance ecosystem.”

For its support of the TPE331 turboprop engine—as equipped on out-of-production aircraft such as the Mitsubishi MU-2 and Beechcraft King Air 100—Honeywell received an overall average score of 8.71 in this year’s survey, up more than a third of a point from last year’s results.

The family earned its highest score (9.56) in the overall engine reliability category. That is the highest score awarded by **AIN**’s readership in this year’s survey (among reported engines), and one of six categories (out of 10) in which it received a score of 9.0 or higher.

While the Phoenix-based company tallied a strong 8.80 score in the parts availability category for the line, the cost of those parts earned it the lowest score (6.29) among the reported engines in this year’s survey. ■