Product Support Survey: Avionics

In the results from this year's AIN Product Support Survey, Garmin remains in the top spot for cockpit avionics manufacturers, with a first-place overall average of 8.2, down 0.1 from last year. Rockwell Collins takes second place, with an overall average of 8.0, the same as last year. In third place this year is Universal Avionics at 7.9, down 0.1 from last year when it and Rockwell Collins shared the second-place slot. Honeywell and BendixKing (they are sister companies but serve different market segments) swap places this year, with Honeywell in fourth place at 7.6 (up 0.1) followed by BendixKing at 7.4 (down 0.3).

Garmin's score this year sees top ratings for overall product reliability (8.8), technical reps (8.4), cost of parts (7.4) and parts availability (8.3). Top ratings for Rockwell Collins are technical reps (8.4), technical manuals (7.9) and parts availability (8.3). Universal Avionics scores the highest rating for warranty fulfillment (8.5) and AOG response (8.4).

On the cabin electronics side, two companies received enough ratings this year to be added to the results: cabin monitor manufacturers Aircraft Cabin Systems and Rosen Aviation.

Tying for first place this year are Gogo Business Aviation and Satcom Direct with an 8.3 overall average, both up 0.1 from last year's first-place tie. Rockwell Collins received the second-highest score this year with a ratings jump of 0.4 to a 7.9 overall average, followed by Aircraft Cabin Systems (7.8), Honeywell (7.5) and Rosen Aviation (7.4).

Satcom Direct tops the charts for overall product reliability at 8.6 and receives high marks for technical reps (8.9), technical manuals (8.3) and warranty fulfillment (8.8). Gogo Business Aviation's high scores are for AOG response (8.4), cost of parts (7.8) and parts availability (9.1).

Garmin

Garmin's avionics products cover a variety of aviation segments from experimental amateur-built aircraft to Part 25 business jets.

To support all of these customers, Garmin has bolstered its product support staff and added training opportunities for in-house support personnel to improve quality of service and responsiveness to customer needs, the company told AIN.

In addition to its on-site pilot training offerings, Garmin now provides product tutorial videos on its website. It is also working with aviation “training and education providers to make our courses accessible to even more pilots and maintainers around the world.”

To support the experimental market, Garmin launched an experimental aviation support team.

“Garmin maintains its firm commitment to delight customers by establishing the industry benchmark for excellence in avionics customer support, product training, publications, warranty, and related services,” the company said.

BendixKing

BendixKing is expanding the markets it serves from the traditional light aircraft to turboprops and light jets with its AeroWave low-cost satcom and soon-to-be-certified AeroVue integrated retrofit cockpit.

During the past year, the company has begun hosting product introduction training webinars for avionics shops that install its products.
Installers can also tap into the company’s remote access system so that experts can assist with troubleshooting during installations, especially with AeroWave systems.

The company has added dedicated field service engineers available to travel to help with entry into service of new products. It has also improved the Web-based repair capabilities locator “with features such as advanced search, multiple part number searches, detailed information on each repair option and repair location information.”

**Gogo Business Aviation**

Gogo Business Aviation, the Gogo division that manufactures air-to-ground airborne connectivity equipment for business aircraft, has made investments in product support that include adding new personnel, investing in technology and delivering more training for customers and employees.

During last year’s second half, Gogo Business Aviation integrated its customer support, technical support, network operations, training and data analytics operations into the customer operations team. The company also invested in training, process support and data analytics and added network tools to resolve problems more quickly.

New support personnel were hired, and these included an instructional designer to improve content, a business process analyst to aid documentation and continuous improvement, two data analytics engineers and a trainer to “extend our reach internally and externally,” according to Gogo.

In this year’s first half, the company hired or promoted three field support engineers to improve product support. Gogo plans to hire another field support employee this year. Technology investments support a new learning management system, a hosted PBX to improve inbound call handling and, according to Gogo, “Extensive and continuous improvements for online customer care on mygogoair.com, resulting in 30 percent improvement in resolution.”

Gogo Business Aviation has lowered its overall trouble ticket rate by 20 percent year-to-date by implementing a detailed performance scorecard at the organization, tier and individual employee level. The company has increased training for tier one technical support personnel, and this allowed them to close 18 percent more cases year-to-date, freeing up tier two support techs to focus on more complex issues.

**Honeywell**

Honeywell has developed a new system to follow up on AOGs. The closed-loop feedback system summarizes AOG status for the customer and “allows the customer to confirm that the order has been fulfilled,” according to Honeywell. In cases where the customer isn’t satisfied that the AOG was fulfilled, Honeywell opens a survey to get active feedback from the customer to establish exactly what is needed. “Since May 20, 2016, we have received more than 2,200 responses with a 98.7 percent agreed completion rate.”

Honeywell solicited customer feedback on its MyAerospace.com website and plans on releasing periodic improvements this year, including estimated ship date information. The site already was upgraded with an improved repair capabilities locator that allows customers “to make decisions about product support based on specific repair requirements.”

In the first quarter of next year, Honeywell expects to
receive STCs for its new wireless data loader (DLMU-W) for Primus Epic-based flight decks. The unit has received FAA TSO approval and is a drop-in replacement for the existing Epic data loader. Equipped with its own short-range Wi-Fi antenna, the DLMU-W should greatly simplify data uploads, which will be available via mobile devices running Honeywell apps such as Honeywell’s Database Loading app and the MyMaintainer Maintenance app. “These apps simplify the traditional methods of uploading and downloading data from aircraft avionics, which saves time, money and frustration for the operator,” according to Honeywell.

For customers of its satcom products, Honeywell has added service enhancements that include the new GoDirect Satcom Toolkit, a mobile app that helps customers with log retrieval and operators’ requirements table loading. Product support engineers can log in remotely to customers’ laptops to help troubleshoot their satcom systems, and this has helped improve service, according to Honeywell. Operators with the HS-720 satcom can get software upgrades done on site, without having to return the unit to Honeywell or schedule a visit from a product support engineer.

Honeywell has also partnered with FlightSafety International to deliver training on APUs, avionics, engines, environmental controls and satcoms. Training is available at FlightSafety learning centers, online or at the customer’s site. Rockwell Collins Early last year, Rockwell Collins added a “customer effort” metric to measure “the ease of customer interaction and resolution during a service request.” During the past year, the company’s customer support organization received a customer effort score of 90 percent. “Research has proved that effort is the best transactional loyalty metric,” according to Rockwell Collins. The company also uses feedback from surveys, advisory boards and customer interactions “to drive support strategies that make it easy for customers to solve problems quickly.”

Rockwell Collins is also focusing on proactively resolving issues and pre-empting future customer contacts by training product support managers “to identify areas where customers might make contact in the future and address the issue during this initial contact, [thus] preventing follow-on calls.” This has been combined with data analytics to identify and address issues that result in repetitive customer contacts as well as measuring time between customer callbacks using the “Next Issues Avoidance” metric.

Supporting all these efforts is a growing team of customer support engineers deployed around the world, and they provide support to customers and Rockwell Collins dealers. Customers can access the list of support engineers and dealers on the Rockwell Collins Support First app, available for Apple and Android mobile devices.

Satcom Direct Satcom service provider and router manufacturer Satcom Direct opened a network operations center at its new world headquarters in Melbourne,
Fla. The headquarters features a 24/7 real-time monitoring center to support customers worldwide. Satcom Direct also introduced its new entry-into-service program, which is “targeted at visiting every customer to educate them on the value of each service SD offers its customers,” the company noted.

New hardware introduced this year includes the SD Wi-Fi Hub, a standalone router and Wi-Fi provider for small to midsize aircraft. The Hub received its first STC on the Citation CJ3 in May, and many more STCs are under development. During the past year, Satcom Direct has also added training courses and released SD Pro, its latest integrated operating platform.

**Universal Avionics**

To improve customer support by placing resources within easy reach of customers, Universal Avionics added a technical support representative in Singapore to support Asian and the western Pacific. Patrick Nenninger joined the company to support European customers from its Switzerland office in Basel. James Thompson was hired as the new repair station manager. Universal Avionics added two authorized support centers for its CVR and CVR/FDR products: Flight Data Systems in the UK and Australia.

The Universal Avionics training department now offers online FMS and UniLink Operational Familiarization courses on the UniNet customer portal. Universal is also developing classroom courses for the new InSight integrated flight deck, including Operational Familiarization and Integration and Installation, which will be available in the fourth quarter. Training events are available quarterly at Universal’s Tucson, Ariz. headquarters and Wichita offices.

Warranty coverage for non-warranty repairs and exchange transactions has been extended to a full year from the previous 90 days. Universal Avionics has added a return material authorization service, “which improved tracking ability and provides customers with new options to choose turn times,” according to the company. And turnaround time on repairs has been reduced to an average of five days.

---

**SURVEY RULES AND METHODOLOGY**

As with AIN Publications’ previous annual Product Support Surveys, the objective this year was to obtain from the users of business jets, turboprop airplanes and turbine-powered helicopters statistically valid information about the product support provided by manufacturers of business aircraft, avionics and engines over the last year and to report this information to our readers. The ultimate goal of the survey is to encourage continuous improvement in aircraft product support throughout the industry.

The survey was conducted via a dedicated website, created by AIN from the ground up to provide improved ease of use and to encourage greater reader participation. AIN emailed qualified readers a link to the survey website and also sent a postcard invitation with login credentials to the survey website.

The survey website was open from May 2 to June 15. Respondents were asked to rate individual aircraft and provide the tail number, age (less than 10 years old or more than 10), primary region of service and whether they used factory-owned or authorized service centers, or both. Respondents were also asked to rate, on a scale from 1 to 10, the quality of service they received during the previous 12 months in the following categories:

- **Parts Availability**—in stock versus back order, shipping time.
- **Cost of Parts**—value for price paid.
- **AOG Response**—speed, accuracy, cost.
- **Warranty Fulfillment**—ease of paperwork, extent of coverage.
- **Technical Manuals**—ease of use, formats available, timeliness of updating.
- **Technical Reps**—response time, knowledge, effectiveness.
- **Overall Product Reliability**—how the product’s reliability and quality stack up against the competition.

Respondents were also asked to recognize individuals who have provided them with exceptional product support and service. The full list of these people is available online at www.ainonline.com/above-beyond-2016.

The 2016 AIN Product Support Survey results for aircraft were published in the August issue, and engines will be featured next month.