



AIN 2010 Product Support Survey

PART TWO • AVIONICS



by Stephen Pope

Garmin ranks number one ahead of tightly packed group of top finishers

Las Vegas oddsmakers don't keep track of such things, but if they did Garmin would have been a safe bet to retake the overall number-one ranking in AIN's 2010 avionics product support survey. After ceding the top spot last year to upstart cabin entertainment equipment maker Flight Display Systems, which dropped to second place overall this time around, Garmin is once again back in first place.

But in an effort aimed at showing how the individual suppliers performed with respect to their closest competitors, we decided to split this year's survey into two groups: cockpit avionics and cabin electronics. The change put Flight Display Systems in the top spot among cabin equipment suppliers ahead of Rockwell Collins and Honeywell, which finished in second and third places in this group. The switch also created dual rankings for Honeywell and Collins, which are major suppliers of both cockpit and cabin products.

Nonetheless, manufacturers generally finished in the same order as they did last year, indicating consistency across the industry as the majority of companies included in the AIN survey garnered overall average scores above 7 on a scale from 1 to 10, where a 1 is considered inadequate and a 10 excellent. Companies not appearing in this year's survey did not receive the minimum number of reader responses required for inclusion in the results.

Taking a look at the cockpit avionics rankings, Garmin faced tough competition from a group of high scorers bunched near the top of the rankings that included Universal Avionics in second place, Rockwell Collins in third place and followed closely by Sandel Avionics, L-3 Avionics Systems and Honeywell, all of which finished within a half point of the lead. Each company in the cockpit avionics category except for the bottom two improved on its scores from last year, with Sandel and Universal Avionics showing the greatest overall improvements.

In the cabin electronics category, Flight Display Systems suffered a slight decline, dropping from an overall average score of 8.08 last year to 7.95 this year—but that was still good enough to put the

Alpharetta, Ga. company ahead of all other participants in spite of strong showings by Rockwell Collins, which scored 7.60 overall; Honeywell, which posted an overall average score of 7.55; and Aircell, with an overall score of 7.54.

Based on the high marks avionics and cabin equipment makers continue to receive from corporate flight departments, charter operators and other users of turbine-powered business aircraft, the industry appears to be doing an exemplary job of supporting customers—and, perhaps more important, equipment makers also seem to be getting better each year. Manufacturers fared particularly well in the AOG (aircraft-on-ground) response category, though an industry-wide blemish continues to be the perceived high cost of replacement parts.

Here's a look at how the top scorers fared in this year's survey.

Garmin

With the notable exception of last year's second-place finish, Garmin has dominated the AIN product support survey rankings every year since they began, with respondents praising the Olathe, Kan. company's cockpit gear as being among the most durable and user friendly in the industry. That acclaim has extended to Garmin's G1000 avionics system, now flying in a variety of business airplanes from King Air turboprops to Cessna's Citation Mustang and Embraer's Phenom jets.

We asked this year's top finishers for insights into what they have done to improve customer support in the last year. The majority of companies said they have used the AIN survey as a barometer of the job they've been doing as well as a guide to help them improve.

"Garmin takes great pride in our products and the support we provide," noted Matt Harrah, the company's director of avionics product support, in an e-mail response. "We take the results of the AIN survey to heart and the leadership of our product support team uses this feedback to find continuous improvements in how we take care of our customers on a day-to-day basis." Specifically, Harrah

mentioned improvements in how Garmin technical representatives troubleshoot problems and a continuing adherence to good customer-service basics as the foundation for everything the product support group at Garmin does.

It also helps that Garmin sells products that rarely seem to need repairs. Each year we receive comments from readers about Garmin's "bulletproof" avionics. This year we are including all your written comments online at www.ainonline.com, but here are a select few written responses from the survey that typify what readers have to say about Garmin's avionics year in and year out: "Great. Absolutely the best radio (530 and 430 combo) going," wrote a medevac Piper Cheyenne operator of his GNS-series products. "The most reliable avionics I have ever used," said a Citation Mustang pilot. "Product has worked as designed from day one," noted a Westwind operator. Said the operator of a Citation CJ3: "Never a problem in 12 years operating Garmin avionics."

As more corporate pilots fly with the G1000 avionics system, we wondered whether Garmin's reliability ratings would continue to lead the industry as they did when the GNS-series products occupied the top of the company's product portfolio. The answer appears to be that the G1000 integrated system is as reliable as any Garmin stand-alone product, based on the high marks across the board customers continue to give. Worth watching, however, were a few of the negative survey comments Garmin received, especially one about "spurious CAS messages" in the Phenom 100's Prodigy by Garmin avionics system, which is based on the G1000. The issue "has almost become a joke among Phenom 100 pilots," wrote one operator. "The Garmin/Prodigy 1000 system is very skittish."

Still, given that the overwhelming

majority of written comments for Garmin were effusively positive and the company's scores improved this year, the responses of a small minority of readers probably do not indicate the start of a trend.

Flight Display Systems

Flight Display Systems was the surprise top scorer in last year's survey, but considering that this was actually the third year in a row that the company has ranked highest among cabin electronics equipment suppliers, that win was no fluke. The secret to the company's success, according to Nick Gray, the son of company founder David Gray, has centered around listening to what customers have communicated is important to them.

More specifically, Flight Display Systems provides live tech support with no automated phone systems to wade through. In addition, the company focuses on quick-turn (24-hour turnaround time) repairs and upgrades and makes sure it stocks all standard products so they can be shipped to installation centers right away. Company reps are also in constant contact with the dealer network, which is the best source for direct customer feedback, Gray noted.

"Additionally, over the past year, we have continued to explore new technology and focused on what will serve our customers tomorrow and going forward," he added. "We are constantly reviewing emerging and developing in-flight entertainment technology. Flight Display Systems strives to bring the best to our customers rather than rolling out outdated technology."

There's actually a touch of modesty in this last statement. Flight Display Systems over the years has introduced a dizzying array of products, so many that the company's top sales people have a hard time putting a number on just how many are offered ("More than 100," is the typical answer.) Top sellers lately have



Flight Display Systems' HD monitors

been passenger moving-map systems, high-definition video displays, cabin entertainment controls and more styles of mount, swivel, hinge and motorized lift than any one person could be expected to keep tabs on. Not bad from a company that started out in 2001 with two employees and a single moving-map product.

Universal Avionics

Universal Avionics climbed to second place among avionics makers this year as the Tucson, Ariz. company's scores continued to rise for the third straight year. Two years ago, Universal implemented an organization-wide customer relationship management system and consolidated its repair facilities with the product support department. Universal's overall average score of 7.92 in this year's survey suggests that the changes appear to be having the desired effect.

Universal's customers also continue to praise the company's technical support reps in the written comments section of the survey. "I love calling Universal Avionics," wrote a Citation Bravo captain. "A human answers the phone and quickly and accurately provides you with the answers to your questions. Their customer service is absolutely amazing! Other companies should follow their example." Wrote another respondent, this one a Citation XLS chief pilot, "These guys are good, and quick."

Universal Avionics received particularly high marks in the categories for warranty fulfillment, parts availability and,

especially, overall product reliability, where it recorded a score of 8.40. One King Air pilot said the Universal FMS in his airplanes has been "the one avionics instrument" that has been totally reliable. Other pilots, however, suggested that Universal pay closer attention to the user friendliness of its UNS line of flight management systems. "Reliability is fine, understanding what the FMS may do next is always a question," wrote a Citation Excel chief pilot. A Sabreliner 65 captain said the UNS-1 FMS suffers from a need to select multiple options when inputting data or nav waypoints. One pilot suggested that Universal sponsor forums or user conferences highlighting the intricacies of what is admittedly a complex piece of avionics.

Rockwell Collins

Rockwell Collins finished in third place in both the cockpit avionics and cabin electronics categories this year after finishing in the fourth spot overall last year. The Cedar Rapids, Iowa company received its highest scores under the warranty fulfillment and overall reliability categories, both of which are perennially strong areas for Rockwell Collins. "Collins products are extremely reliable," wrote a Falcon 2000 chief pilot. "Good product support. Good AOG response. Warranty is always fulfilled. Tech reps very helpful."

Collins said it has enhanced its worldwide field support presence through creation of an International and Service Solutions organization to increase focus on technical and logistical support. The avionics maker has also reshaped its product and system support teams and improved its customer issue tracking and in-service product performance tools to cut replacement part turnaround times. Average turnaround time for a repair product shipped to a Rockwell Collins service

center is three days, the company said.

Rockwell Collins noted it has also spent time and money to enhance its worldwide network of avionics spares operations to minimize AOG time. "They always seem to have what you need or can get it soon," said a Hawker 800XP chief pilot. "The tech is at the aircraft before the service center," noted a Falcon 2000EX captain. "The two guys in Singapore are the best ever."

Interestingly, Rockwell Collins notched a slight improvement in the category for cost of parts, which is typically the lowest graded across the industry. While written comments often blasted avionics makers for the "outrageous" and "scary" cost of replacement components, many wrote that while Collins prices are high, they also seem fair. "Prices are high but there have been some breaks in pricing," said the chief of maintenance for a Beechjet 400A operator. A Falcon 2000 operator wrote that Collins's Casp avionics service plan is "a bit pricey, but it's a good program."

Honeywell

After landing in seventh place overall last year, Honeywell moved into sixth place in the avionics column and fourth place on the cabin electronics side. The Phoenix company did especially well in the warranty fulfillment category, posting a score of 8.01 for cabin products and 7.88 for avionics components, both of which were higher than last year's score in the category.

A few years ago Honeywell centralized its customer call center to a single 24/7 team and a single phone number. Improved customer management tools have reduced customer call handling times to minutes. As part of this effort, Honeywell now accepts verbal purchase orders and follows up with customers within 24 hours to ensure that AOGs have been resolved. Scores in the mid 7s for both cabin and

avionics products indicate the improvements are working.

Honeywell has also created an online aerospace portal at www.myaerospace.com, where customers have access to pricing and parts availability, online order placement, order tracking, real-time access to technical publications and auto generation of e-mail order status. Later this year, new features will include credit-card processing, invoice access and issuance of return authorization numbers online. Honeywell has also simplified the registration process and added customizable menus so customers can quickly access information they need most often.

A continuing bright spot on the support side is Honeywell's Spex parts exchange program, which in the last year handled 25,000 transactions, with 97 percent of all replacements shipping within 24 hours, the company claimed. Honeywell is also storing more parts in Europe, the Middle East, Asia and India, with delivery of more than 90 percent of stocked parts or exchanges coming from within these regions. Because of the recent growth in emerging business aircraft growth regions, Honeywell has also added authorized service centers in Latin America, the Middle East, China and India.

L-3 Avionics


L-3 Communications Avionics Systems showed one of the biggest improvements in this year's survey, climbing from seventh place among avionics makers last year to fifth place this time. The company received high marks for overall reliability and warranty fulfillment.

Asked what the company has done differently in the past year to improve product support, a spokeswoman responded, "We are continually striving to improve our communication with customers as

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Survey methodology and all the reader comments about product support are available at www.ainonline.com/resource-center/

The results of the aircraft survey ran last month; the engine results will run in next month's issue.

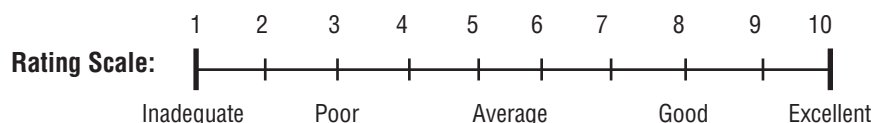


2010 RATINGS

Companies are listed in the order of their 2010 overall averages.

	Overall Average 2010	Overall Average 2009	Ratings Change from 09 to 10	Percentage Change	Parts Availability	Cost of Parts	AOG Response	Warranty Fulfillment	Technical Manuals	Technical Reps	Overall Product Reliability
COCKPIT AVIONICS MANUFACTURERS											
Garmin	8.07	8.00	0.07	0.85%	8.22	7.24	7.91	8.20	8.00	7.97	8.77
Universal Avionics	7.92	7.62	0.30	4.00%	8.19	6.67	8.00	8.06	7.86	8.26	8.40
Rockwell Collins	7.78	*7.60	0.18	2.31%	7.99	6.70	7.92	8.11	7.54	7.84	8.23
Sandel Avionics	7.71	7.37	0.34	4.59%	7.79	7.29	8.08	8.08	7.54	7.92	7.38
L-3 Avionics Systems	7.58	7.25	0.33	4.50%	7.60	6.76	7.67	7.70	7.43	7.24	8.38
Honeywell	7.47	**7.43	0.04	0.53%	7.75	6.24	7.44	7.88	7.39	7.58	7.94
Honeywell Bendix/King	7.33	7.22	0.11	1.50%	7.50	6.27	7.27	7.64	7.45	7.37	7.85
Shadin	6.94	7.48	-0.54	-7.21%	7.19	6.19	6.93	7.17	7.07	7.17	7.00
Avidyne	6.51	6.93	-0.42	-6.12%	6.27	6.15	5.82	6.70	6.61	6.85	7.10
CABIN ELECTRONICS MANUFACTURERS											
Flight Display Systems	7.95	8.08	-0.13	-1.66%	8.13	7.15	8.17	8.16	7.57	7.82	8.38
Rockwell Collins	7.60	*7.60	-0.00	-0.06%	7.83	6.72	7.68	8.05	7.29	7.69	7.82
Honeywell	7.55	**7.43	0.12	1.66%	7.82	6.45	7.61	8.01	7.46	7.47	7.96
Aircell	7.54	7.31	0.23	3.09%	7.72	6.80	7.33	7.74	7.15	7.38	8.32
Rosen	7.17	7.50	-0.33	-4.46%	7.33	6.58	7.09	7.48	6.93	6.59	7.85
MagnaStar (supported by Teledyne Controls)	6.84	6.30	0.54	8.60%	7.03	6.08	6.67	7.27	6.71	6.45	7.49
Audio International	4.93	N/A	N/A	N/A	4.13	4.60	3.86	6.67	5.22	5.22	5.63

Compiled by Jane Campbell with data provided by Forecast International of Newtown, Conn. **Bold** indicates highest number in each category. This is the first year AIN has separated the ratings for cockpit avionics and cabin electronics. * Last year Rockwell Collins's combined score was 7.60. ** Last year Honeywell's combined score was 7.43.



well as the way product issues are reported internally. If we have an unhappy customer, our goal is to earn their satisfaction by following up and following through. When a product issue arises, we try to jump on it, identify the root cause, and then make improvements that benefit the initial customer as well as future customers.”

This approach appears to be working considering the overwhelming majority of written responses from readers were positive. The L-3 Avionics spokeswoman also noted that the company has sharpened its focus on reliability, “and through this process, we found that some products returned for repair had been previously repaired by unauthorized

third-party repair centers.” L-3 advises customers to send products to authorized shops for repairs.

Aircell

Aircell has been one of the most talked-about companies in aviation in the last 12 months, and for good reason. The company has sold nearly 10,000 of its high-speed In-

ternet systems, which provide broadband Wi-Fi connections in flight anywhere over the continental U.S. The majority of installations have been aboard airliners, but the introduction of Aircell’s ATG-4000 and ATG-5000 to the business aviation market means sales on this side of the company’s ledger are growing quickly.

Perhaps owing to the fact that buyers like what Aircell is selling, the company moved up in the rankings from 10th place overall last year to fourth in the cabin electronics category. In fact, Aircell showed improvements in every category. It scored an 8.32 in overall reliability, the second highest among cabin equipment makers and fourth highest in this category overall.

With the huge growth in customer base, the focus for the company over the years has been ensuring its support capability keeps pace. To meet that expectation, Aircell has implemented a new performance-measurement system that uses nearly a dozen metrics to track its customer interactions. Aircell has also expanded its customer support staff by a quarter, increased use of online survey tools to gather ongoing customer feedback and created an extended warranty program for all Aircell products.

Others

The rest of the field in this year’s survey generally consisted of smaller players that more frequently deal with dealers and installers rather than end users. That could help explain why these companies—with the exception of Sandel Avionics, a perennial strong performer in the survey—received lower scores than the top half of the class.

On the cockpit avionics side of the bulkhead divider, bottom finishers were Honeywell Bendix/ King, Shadin and Avidyne. The good news for Bendix/King is that it has continued to show improvements in its scores in each of the last three years. Its poorest showings were in the categories for cost of parts and AOG response, but overall reliability continues to improve as evidenced by its score of 7.85 in this category.

The survey’s two lowest-place finishers on the cockpit avionics side, Shadin and Avidyne, were the only two to record lower scores this year than last.

It was a similar story for makers of cabin electronics equipment, as the lowest-place finishers generally were the only companies to end up with lower scores than the year before. Rounding out the bottom of the cabin electronics survey group were Rosen, MagnaStar and Audio International. □

This year’s survey was devised by AIN’s editors and designed and administered by Newtown, Conn.-based Forecast International in full collaboration with AIN.