

# AIN 2012 PRODUCT SUPPORT SURVEY

## PART ONE > AIRCRAFT

**Gulfstream holds the number one spot for jets. Mitsubishi retains the top spot for turboprops, with Pilatus taking the top slot for newer turboprops. Bell once again leads among helicopter manufacturers.**

The results of this year's AIN Product Support Survey took some interesting turns, but Gulfstream Aerospace once again retains the top spot in the Aircraft Survey, in the combined, newer and older aircraft ratings. The results of the Product Support Avionics Survey will be published in AIN's September issue, followed by the Engines Survey in the October issue.

### Combined Ratings

In first place, Gulfstream saw its rating climb this year, to 8.2 from last year's 8.0, a 2-percent improvement. Embraer's 13-percent jump to 8.1 from 7.2, the greatest change among all the manufacturers, propelled it to second place. Last year, Embraer received many fewer ratings and came in last. Embraer's improved performance is likely due to continual improvement of its product support efforts, which is reflected in many positive comments provided by survey takers; the fact that most of its business jets are fairly new and thus under warranty; and an improved response rate now that many more of its business jets are in service. Boeing Business Jet operators helped boost the company's rating by 4 percent over last year to 8.0 and third place.

Bombardier's Challengers and Cessna's Citations tied for fourth place this year at 7.7; Bombardier moved 3 percent higher from sixth place last year, while Cessna dropped 3 percent from second place last year.

Dassault Falcon saw a 1-percent improvement this year to fifth place.

The rating for Gulfstream's midsize jets dropped 5 percent to sixth place (7.5) this year from third last year (7.9).

In seventh place are Bombardier's Globals and Learjets, both with ratings of 7.4 (same as last year for Globals and up 1 percent for Learjets). Hawker Beechcraft moved to the end of the rankings, with a drop of 1 percent to 7.2 for its smaller jets and 3 percent lower to 7.1 for its Hawkers. This may reflect customer uncertainty about the state of the company's finances as it wends its way through the process of bankruptcy protection and restructuring.

In the turboprop category, the lineup is the same as last year, with Mitsubishi's MU-2 at number one, although with a 1-percent drop this year to 9.3. Pilatus's PC-12 also dropped, by 6 percent to 7.4, but remained in second place, followed by Hawker Beechcraft's King Airs at 7.0.

### Newer Business Jets

To reflect the support provided to owners and operators of newer and older business aircraft more accurately, the AIN Product Support Survey splits the model groupings into aircraft that were delivered in the past 10 years and those delivered before then.

In the newer jets category, Gulfstream large-cabin jets also claimed the top spot, with a rating of 8.3, up 2 percent from last year. Where Gulfstream shined in the categories was in overall aircraft reliability (garnering a high score of 9.1). The airframer also topped other

manufacturers' scores for maintenance tracking programs (Avtrak deserves credit as it is Gulfstream's vendor), AOG response, parts availability and factory-owned service centers. Cessna, which tied with Gulfstream for top place last year, dropped by 1 percent to 8.0 and second place. The company surpassed its competitors in the cost-of-parts category, with a 6.8, not an overall high score (everyone hates aircraft parts prices), but relatively higher than competitors' ratings.

Embraer's 11-percent jump brought it into a tie for second place with Cessna's Citations. Interestingly, Embraer received the highest score among the manufacturers for technical manuals, a positive indicator for a manufacturer headquartered in a country where English isn't the primary language. Embraer's cost-of-parts rating was also relatively high at 6.7, almost as good as Cessna's. If manufacturers really were able to improve parts costs significantly, this could have a significant effect on their overall ratings.

Bombardier's Learjets experienced the

second-highest ratings jump in newer jets, 5 percent, to 7.9 and third place. Learjet took the top rating for the technical representatives category, an important area as these people are the main points of contact for owner/operators. Dassault Falcon, in fourth place (7.8) for newer jets, took the highest rating for the authorized service center category, recognition of the importance of having strong representation in the maintenance arena by companies that service a manufacturer's products.

Bombardier's Challenger series took fifth place at 7.7, with the third-highest rating (8.5) for overall reliability, a key factor for any jet. Closely behind in sixth place (7.6) were Gulfstream's midsize jets, enjoying top scores for warranty fulfillment (8.9) and maintenance tracking programs (8.6). Bombardier's Global series was next in seventh place (7.5), with relatively high ratings for technical representatives and overall reliability.

Hawker Beechcraft's two model lineups saw a 1-percent drop (Hawkers) and 9-percent drop (Premier and 400-series).

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### Combined Overall Average Ratings of Newer and Older Aircraft (in order of 2012 ratings)

	Overall Average 2012	Overall Average 2011	Rating Change from 2011-2012	Percent Change from 2011-2012
<b>JETS</b>				
Gulfstream (GII through G550)	8.2	8.0	0.2	2%
Embraer (Phenom 100/300, Legacy 600/650, Lineage 1000)	8.1	7.2	0.9	13%
Boeing (BBJ)	8.0	7.7	0.3	4%
Bombardier (Challenger)	7.7	7.5	0.2	3%
Cessna (Citation)	7.7	7.9	-0.2	-3%
Dassault (Falcon)	7.6	7.5	0.1	1%
Gulfstream (Astra, Westwind, G100 through G200)	7.5	7.9	-0.4	-5%
Bombardier (Global Express/XRS/6000, Global 5000)	7.4	7.4	0.0	0%
Bombardier (Learjet)	7.4	7.3	0.1	1%
Hawker Beechcraft (Premier, Beechjet 400/400A, Hawker 400XP)	7.2	7.3	-0.1	-1%
Hawker Beechcraft (Hawker)	7.1	7.3	-0.2	-3%
<b>TURBOPROPS</b>				
Mitsubishi (MU-2, Solitaire, Marquise)	9.3	9.4	-0.1	-1%
Pilatus (PC-12, PC-12NG)	7.4	7.9	-0.5	-6%
Hawker Beechcraft (King Air)	7.0	7.0	0.0	0%

Aircraft are listed in the order of their 2012 overall averages (ties are ordered alphabetically).

Source: AIN 2012 Product Support Survey

### Older Business Jets

Gulfstream saw a 4 percent climb to 8.2 this year to retain first place in the older business jets category, leading the manufacturers in nine out of 10 categories. Bombardier Challengers climbed to second place this year, with a significant 8 percent rise to 7.7, scoring a high of 6.1 (a high among manufacturers of older business jets) in the perennially contentious cost-of-parts category. In third place (7.5) was Gulfstream midsize jets, followed by Cessna and Dassault

Falcon sharing fourth place at 7.4.

Hawker Beechcraft's smaller jets gained a respectable 6 percent to 7.3, the second-highest gain for any manufacturer and tying with large-cabin Gulfstreams for the critical warranty fulfillment category. Learjet came in sixth place with a 1-percent drop, followed by Hawker jets with a 3-percent drop.

### Newer and Older Turboprops

Splitting the turboprops into newer and older segments revealed a top-place

rating of 7.6 for newer Pilatus PC-12s and 7.2 for Hawker Beechcraft King Airs. Daher-Socata TBM-series turboprops didn't receive enough ratings to be included.

In the older category, Mitsubishi's MU-2 remains on top, with a 9.3 (down 1 percent from last year), followed by Hawker Beechcraft King Airs, up 1 percent to 6.9.

### Rotorcraft

Bell Helicopter climbed by 4 percent over last year, retaining its position

in first place with the only 7-plus rating among helicopter OEMs at 7.8. At 8.5, Bell outstripped its competitors in the overall reliability category, although overall last-place finisher Sikorsky received a strong 8.1 in that all-encompassing category.

AgustaWestland came in second place this year at 6.8, up 1 percent from last year, and Eurocopter ranked third with a 6.7, down 1 percent. Eurocopter received high marks from survey takers for its factory-owned service centers, at 7.9.

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## 2012 CATEGORY RATINGS

Aircraft are listed in the order of their 2012 overall averages (ties are ordered alphabetically)	Overall Average 2012	Overall Average 2011	Rating Change from 2011-2012	Percent Change from 2011-2012	Factory-Owned Service Centers	Authorized Service Centers	Parts Availability	Cost of Parts	AOG Response	Warranty Fulfillment	Technical Manuals	Technical Reps	Maintenance Tracking Programs	Overall Aircraft Reliability
<b>NEWER BUSINESS JETS</b> ↑														
Gulfstream (G300 through G550, GIV through GV)	8.3	8.1	0.2	2%	8.0	7.6	8.6	6.0	8.6	8.6	8.2	8.8	8.6	9.1
Cessna (Citation)	8.0	8.1	-0.1	-1%	7.8	7.3	8.3	6.8	8.2	8.3	7.8	8.1	8.3	8.4
Embraer (Phenom 100/300, Legacy 600/650, Lineage 1000)	8.0	7.2	0.8	11%	7.8	7.7	7.4	6.7	8.4	8.6	8.3	8.7	8.0	8.6
Bombardier (Learjet)	7.9	7.5	0.4	5%	7.8	7.7	7.6	6.1	8.0	8.4	8.2	8.9	8.1	8.1
Dassault (Falcon)	7.8	7.8	0.0	0%	7.1	7.8	7.9	6.3	8.0	8.2	7.4	8.6	7.9	8.4
Bombardier (Challenger)	7.7	7.8	-0.1	-1%	7.1	7.3	7.3	6.3	7.8	7.8	8.0	8.7	7.8	8.5
Gulfstream (G100 through G200)	7.6	7.8	-0.2	-3%	6.9	7.4	7.5	5.3	7.9	8.9	7.4	8.0	8.6	8.3
Bombardier (Global Express/XRS/6000, Global 5000)	7.5	7.4	0.1	1%	6.8	7.1	7.2	5.5	7.7	7.9	7.9	8.5	8.0	8.3
Hawker Beechcraft (Hawker)	7.2	7.3	-0.1	-1%	6.9	7.7	6.6	6.2	6.6	7.5	7.1	7.9	7.6	7.9
Hawker Beechcraft (Premier, Beechjet 400A, Hawker 400XP)	7.1	7.8	-0.7	-9%	6.6	6.9	6.7	5.6	7.1	7.7	7.6	7.4	7.8	7.7
<b>OLDER BUSINESS JETS</b> ↑ ↑														
Gulfstream (GII through GV, G300 through G550)	8.2	7.9	0.3	4%	7.8	8.0	8.3	5.8	8.6	7.9	8.5	8.8	8.9	9.0
Bombardier (Challenger)	7.7	7.1	0.6	8%	6.7	7.7	8.0	6.1	7.9	7.3	8.0	8.4	8.2	8.5
Gulfstream (Astra, Westwind, G100 through G200)	7.5	N/R	N/R	N/R	7.3	7.2	6.8	5.7	7.9	6.9	7.9	8.5	7.8	8.5
Cessna (Citation)	7.4	7.6	-0.2	-3%	7.5	7.4	7.4	5.8	7.4	7.4	7.5	7.7	7.8	8.3
Dassault (Falcon)	7.4	7.3	0.1	1%	6.6	7.6	7.9	5.7	7.7	7.5	6.7	7.8	7.6	8.7
Hawker Beechcraft (Premier, Beechjet 400)	7.3	6.9	0.4	6%	6.7	7.4	6.8	4.9	7.1	7.9	7.2	7.9	7.8	8.7
Bombardier (Learjet)	7.1	7.2	-0.1	-1%	6.0	7.0	7.3	5.7	7.4	7.0	7.7	7.7	7.4	7.8
Hawker Beechcraft (Hawker)	7.0	7.2	-0.2	-3%	6.7	7.8	6.4	5.6	6.9	6.5	6.9	7.3	7.3	8.1
<b>NEWER TURBOPROPS</b> ↑														
Pilatus (PC-12, PC-12NG)	7.6	N/R	N/R	N/R	7.0	7.9	7.9	6.3	7.9	7.8	7.7	7.6	7.2	8.5
Hawker Beechcraft (King Air)	7.2	7.4	-0.2	-3%	7.4	7.0	7.2	5.8	7.1	7.3	7.3	7.1	7.0	8.5
<b>OLDER TURBOPROPS</b> ↑ ↑														
Mitsubishi (MU-2, Solitaire, Marquise)	9.3	9.4	-0.1	-1%	9.3	9.0	9.5	7.9	9.6	9.8	9.1	9.7	9.0	9.8
Hawker Beechcraft (King Air)	6.9	6.8	0.1	1%	6.2	6.8	7.1	5.1	6.9	7.0	7.0	6.9	7.1	8.1
<b>COMBINED NEWER AND OLDER BUSINESS JETS</b>														
Boeing (BBJ)	8.0	7.7	0.3	4%	6.9	8.1	8.0	6.5	7.9	7.9	8.6	7.8	8.6	8.7
<b>ROTORCRAFT</b>														
Bell	7.8	7.5	0.3	4%	7.4	7.9	7.6	6.1	7.9	7.6	8.3	8.6	7.9	8.5
AgustaWestland	6.8	6.7	0.1	1%	6.2	6.9	6.0	5.0	7.2	7.3	6.9	7.8	6.6	7.6
Eurocopter	6.7	6.8	-0.1	-1%	7.9	7.2	6.0	5.1	5.8	7.1	7.1	7.0	6.9	7.6
Sikorsky	6.6	6.8	-0.2	-3%	6.7	7.3	5.6	4.4	6.1	6.7	6.3	7.7	6.9	8.1

The Boeing BBJ received a total of 24 responses; 13 of these are for newer BBJs and 11 are for older BBJs and therefore were not qualified to be rated in the newer business jets and older business jets categories (which required 20 responses each). They did qualify for the combined ratings and that is why they are listed here. N/R=not rated last year.

↑ Less than 10 years old      ↑↑ More than 10 years old



Bombardier Global Express XRS

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## Methodology of AIN's 2012 Product Support Survey

As with AIN Publications' previous annual Product Support Surveys, the objectives of this year's survey were to obtain statistically valid information about the product support provided by business aircraft manufacturers over the last year from the users of business jets, turboprop airplanes and turbine-powered helicopters 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.

This survey was conducted via a dedicated website. Although similar in form and function to AIN's previous Product Support Survey website, which was developed and hosted by a third party, AIN staff and a consultant built this year's survey website 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 questionnaire. Qualified readers for whom we did not have an email address were sent

postcards with the same link. In total, 26,222 readers were invited to participate in the survey.

The survey website was open from May 7 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 one to 10, the quality of service they received during the previous 12 months in the following categories:

- **Factory-owned Service Centers**—cost estimates versus actual, on-time performance, scheduling ease, service experience.
- **Authorized Service Centers**—same as above.
- **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**—response time, knowledge, effectiveness.

- **Maintenance Tracking Programs**—cost, ease of use, accuracy, reliability.

- **Overall Product Reliability**—how the product's reliability and quality stack up against the competition.

Respondents were also asked to recognize individuals who had provided them with exceptional product support and service. The list of these individuals is available on AINonline at [www.ainonline.com/above-beyond-2012](http://www.ainonline.com/above-beyond-2012). The 2012 AIN Product Support Survey results for aircraft are published in this issue, avionics will be featured next month and engines will follow in October.

For information about the survey methodology and other questions about the survey, please contact David Leach, AIN director of finance and new product development, at [dleach@ainonline.com](mailto:dleach@ainonline.com). —R.R.P.

### SURVEY BY THE NUMBERS

Respondents who provided some survey data	1,425
Respondents who completed the survey in its entirety	1,264
Aircraft rated	2,069
Aircraft models receiving ratings	175
Minimum ratings required to be included in data	20*
Respondents who rated aircraft	1,320

\*This minimum applies to aircraft within a model and age group as well as a manufacturer's overall average.

## What have you done for me?

by Matt Thurber

While sales of new aircraft remain relatively low, every manufacturer has large fleets that continue racking up the flight hours, and all of these aircraft require ongoing support. In fact, the need for support grows as the aircraft age. All of the major airframe manufacturers must continually invest in product support, and even some companies that hold the type certificates of out-of-production aircraft make a strong effort to keep the fleets flying safely and efficiently. Following are summaries of efforts made by companies that responded to AIN's request for information about the past year's product support activities.

### AgustaWestland

Italy's AgustaWestland has expanded its service-center network and last year added new facilities, reaching a total of 75 authorized service and blade repair centers. New facilities include Era Group; Arrow Aviation in Broussard, La.; and Helipark in São Paulo, Brazil. AgustaWestland and Abu Dhabi Aviation established a joint venture for helicopter maintenance in the United Arab Emirates called AgustaWestland Aviation Services. Services include sale of parts and accessories, component repair and overhaul, customization, modification and upgrades. "The joint venture's scope of activities could be further expanded to encompass special configuration development, component production and helicopter assembly," according to AgustaWestland.

At its Philadelphia base, AgustaWestland opened a new fleet control center, which mirrors the company's fleet operations center in Italy. The new

center supports more than 150 customers in North and Central America around the clock and can assist with issues elsewhere in the world.

AgustaWestland has expanded the number of technical representatives and customer service managers to more than 70 worldwide.

### Bell Helicopter

To improve the product support delivered to customers and operators, Bell Helicopter expanded its worldwide service facilities and added new training capabilities during the past year.

Last month, Bell opened a new \$25 million MRO and completions facility at Seletar Aerospace Park in Singapore, built in partnership with sister company Cessna. The facility includes a 24,000-sq-ft hangar for Bell (31,000 sq ft for Cessna), warehouse, office and back shop space. In India Bell opened an office in New Delhi and customer service facilities in Bangalore and Mumbai. Bell's Aviation Services European regional hub received EASA and Ukraine Part 145 approval. New Bell service centers are available in Chile, Kazakhstan, Russia and Western Australia, and Bell has added more M&O conferences to the schedule for this year.

Bell is working with third-party tail rotor blade developers, such as Van Horn Aviation, to provide alternative products for customers.

On the training side, Bell signed an MOU with Guanchen Aviation to open a Bell-authorized flight training school in China, opened its first permanent international training center in Singapore, added new EASA training certification for the 429 and 407GX and created a



Bell 429

lower-cost 412 initial and recurrent pilot training program.

### Bombardier

Bombardier Customer Services has implemented a series of parts-related pricing and service initiatives, including building a new Singapore facility at Seletar Aerospace Park, the 10th Bombardier-owned service center in the company's network. This facility will open next year.

Bombardier has added more people, with regional support offices staffed by field service representatives, customer support account managers and customer liaison pilots in Sydney, São Paulo, Singapore, Hong Kong, Mumbai, Dubai and a new Shanghai office. At factory-owned service centers, Bombardier has added an overnight shift. Eight facilities are now operating 24/7, and the Amsterdam center should join that list shortly. The 24/7 shifts allow customers to drop in unannounced with unexpected problems.

Bombardier said earlier this year that it has extended its parts price-matching program permanently. The company also

extended the warranty on material purchased from Bombardier to two years, including items that Bombardier doesn't manufacture. The dead-on-arrival (DOA) and no-fault-found (NFF) programs cover shipping, labor and restocking fees for DOA parts or parts that didn't solve a maintenance issue. If an AOG part isn't used and a Bombardier technician helped in troubleshooting, there is no charge for restocking.

Bombardier continues its effort to cut down the number of NFF parts, which are costly for the manufacturer, the supplier and the customer. Bombardier is working toward reducing the top 10 NFF parts for each program (Learjet, Challenger, Global) to less than 25 percent.

Following the success of the Global reliability improvement program, Bombardier is adding a similar program for the Challenger 300.

### Cessna

Cessna has expanded its mobile service unit fleet, part of the company's ServiceDirect initiative. The latest event

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## What have you done?

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covered by one of the units was the London Olympics. Last year, according to Cessna, mobile units performed more than 2,300 service events in the U.S., Canada and Europe. The total number of mobile units reached 15 last year, and four are being added this year, including one more in Europe, bringing the European total to three. ServiceDirect includes AOG go teams and an air response team, as well as HomeService and temporary personnel support for companies that need assistance performing maintenance at their facilities.

More than 6,000 Cessna Citations have been delivered, and recently Cessna has announced plans to expand in China. This includes [agreements to manufacture the Citation Sovereign and Latitude in China](#) as well as an [entirely new business jet](#) for the global market. Earlier this year

service became available to 7X operators in June, and will be added to the 900 and 2000 models with EASy cockpits later this year. FalconBroadcast “provides real-time notification of in-flight events and maintenance status,” so operators can start troubleshooting problems and preparing for repairs before landing. This helps operators maximize dispatch reliability.

Dassault Falcon reduced the prices of more than 14,000 rotatable and high-demand exchange parts since the beginning of this year. Inventory has been increased by 30 percent at Singapore, Shanghai, Sydney and São Paulo distribution centers. Dassault Falcon is planning new distribution centers in Moscow and Beijing. The company says its spares service levels for routine and AOG shipments are 98 percent (on-time delivery on the day required by the customer). “AOG orders are expedited and ready to ship on average within 60 minutes,” according to the company.

Finally, new cardboard packaging lowers shipping fees and is more



Cessna Citation XLS+

Cessna signed an agreement to appoint Shanghai Hawker Pacific Business Aviation as an authorized service facility. Beijing Dingshi GA Tech Service Center has been appointed as an authorized Citation service facility, to provide service for operators of the Citation XLS+, Sovereign and X.

### Dassault Falcon

During the past year, Dassault Falcon has made a number of moves to improve the services it provides to operators of the more than 2,100 Falcons delivered to 81 countries. The company established Dassault Falcon Aircraft Services-China, a partnership with Shanghai Hawker Pacific, at Shanghai Hongqiao Airport in this year's second quarter. Services offered include line maintenance, AOG support, troubleshooting and component replacement.

In addition, the new FalconBroadcast airborne aircraft health-monitoring

environmentally friendly. “Cardboard boxes offer up to five-fold weight reductions,” according to Dassault Falcon, “without impairing packaging durability.”

### Eclipse Aerospace

Support for the 261 Eclipse 500 very light jets that were built remains strong under the management of Eclipse Aerospace, which purchased the assets of bankrupt Eclipse Aviation and is [returning the jet to new production](#). During the past year Eclipse Aerospace has added free maintenance tracking for all operators, with email notifications of maintenance-due items, and added a gold-level service center in Germany and parts distribution in Europe. Customers can now order parts by telephone, and 89 percent of parts requests ship on the day ordered and 5 percent on the next day, according to the company.

To speed up product improvements



Embraer Legacy 600

and identify component reliability issues earlier, Eclipse Aerospace has upgraded its internal reliability tracking and reporting process. Additional data parameters and faster sampling rates for the onboard diagnostic storage unit (DSU) “have provided more data and better detail to identify faulty components more easily and more accurately,” according to Eclipse. The DSU analysis tool has been upgraded so service engineers “can identify faulty components more easily and more accurately.” Eclipse is also upgrading the Avio maintenance computer to speed up and improve real-time identification and troubleshooting of aircraft faults as well as expanding the aircraft computer system event code coverage for improved identification of system status and component level faults.

### Embraer

Embraer has stepped up its service capabilities during the past year, adding 20 new service facilities for a total of more than 60 worldwide. A new Embraer-owned service center opens in Brazil in the third quarter next year. Embraer has strengthened its customer support contact center technical team, and added people to field service teams and new customer account managers in Asia Pacific, Europe and Middle East regions. To speed delivery of parts, the company invested in additional inventories around the world, including adding on-site parts at 43 authorized service centers. Line support in Russia for the Legacy 600/650 was added, including local parts inventories.

Last year Embraer held nine executive operator conferences for Legacy 600/650 and Phenom 100/300 customers. The aircraft health and advanced diagnosis (Ahead) system is now available for the Phenom 100 and 300.

Other new developments include making technical manuals available on the iPad and via multiple Web browsers, adding an iPhone customer support and services guide app to help customers connect directly to the nearest service

center, according to Embraer, and selection of Camp Systems as the maintenance tracking service provider.

### Eurocopter

Eurocopter's Global Logistics Center in France achieved significant milestones this year following its formal launch last November. Two years in development, the “Marlog” project (short for Marignane Logistics) involved the overhaul of a historic Eurocopter plant in Marignane and the construction of a new facility less than three miles away in Les Florides industrial park.

Both facilities function as fully automated warehouses using sophisticated Dematic conveyer and sorting systems. The 474,000-sq-ft Marignane facility, with 70,000 storage spaces, handles incoming deliveries, storage and distribution to internal customers, in particular the final assembly line. It became fully operational in November last year.

The 570,000-sq-ft Florides facility, with 110,000 storage spaces, handles outgoing items, including parts deliveries, and became operational in May last year. Operating 24/7 to support 10,929 helicopters in service worldwide, Eurocopter Global Logistics is shipping an average of 2,530 items in 1,012 parcels per day.

Also located at the Florides campus are separate buildings housing Eurocopter's logistics center, including offices for logistics sales management and forecast teams and a call center, which coordinates parts distribution worldwide.

Daher-Socata, the aerospace division of Europe's Daher Group, coordinated development of the logistics center with Eurocopter and provides most of the staff for the two warehouses. According to Daher, the two warehouses constitute the largest logistics center for aerospace in Europe.

Joseph Saporito, executive vice president of the Global Supply Group, said Eurocopter is reaping the benefits of its new logistics platform “in terms of customer satisfaction and competitiveness.”

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## What have you done?

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### Gulfstream

Like other OEMs, Gulfstream is expanding into China. The company “has operational control of a 78,000-sq-ft hangar” in Beijing and expects to begin maintenance operations shortly. The Beijing facility is a joint venture with Hainan Airlines Group/Grand China Aviation Technik. Gulfstream also opened a Hong Kong product support office last October. **Gulfstream rebranded its Soracaba, Brazil facility as Gulfstream Brazil.** At London Luton Airport, Gulfstream moved into a new hangar that almost doubled the company’s space on that field. And Gulfstream is expanding its Westfield, Mass., facility with a new 100,000-sq-ft hangar to fit the new G650 and generate an expected 100 new jobs. Gulfstream added a new brake repair, modification and overhaul

### Hawker Beechcraft

Hawker Beechcraft (at the time this was written) was still operating under bankruptcy protection, and it was **not known** what effect its proposed acquisition by China’s Superior Aviation might have on product support for the thousands of aircraft it and its forebears have produced. According to a company spokesman, “As the company continues its financial restructuring, we want to reiterate that it is business as normal and our commitment to providing the best products and services remains unchanged. Hawker Beechcraft expects to emerge from this process as a stronger company with a healthy balance sheet.”

Meanwhile, Hawker Beechcraft Global Customer Support has continued building its network of capabilities and services. The Hawker Beechcraft Parts & Distribution system now includes 17 warehouses and distribution centers, with new facilities in India and China. The



Gulfstream G200

shop to its Lincoln, Calif. component facility and positioned a rapid-response maintenance vehicle in the San Francisco Bay Area for AOG support and light maintenance.

The Gulfstream Network, a Web-based multimedia center, was launched June 12 at the Gulfstream operators conference, which saw attendance by about 750 customers and 450 suppliers. “The Gulfstream Network provides news, safety and technical updates and continuing education and instruction for customers and employees,” according to Gulfstream.

Two new Gulfstreams—the G280 and G650—enter service this year, and the PlaneParts cost-per-hour maintenance program has been expanded to include them. Gulfstream has also “improved oversight of no-fault-found parts to prevent fault reoccurrence,” improved the return/repair process for core parts, sped up time for parts shipping and customs clearance and “improved product support for obsolete aircraft.”

network can receive and ship 4,000 items per day at a 98-percent planned part fill rate and the company says it responds to AOG requests within 37 minutes. Twenty-five agents staff the customer support center, delivering around-the-clock support, with hold times averaging less than 45 seconds.

Factory-owned Hawker Beechcraft Services added new facilities, including New Castle Airport near Wilmington, Del., and Dekalb-Peachtree Airport near Atlanta. **The new facility at Aeropuerto del Norte in Monterrey, Mexico,** opens in the fall and includes a 13,400-sq-ft paint hangar. The Wilmington facility brings Hawker Beechcraft back into the Northeast region, where it used to have a maintenance presence in Atlantic City, N.J.

Hawker Beechcraft also employs mobile service vehicles and teams based at each factory-owned facility as well as heavy support vehicles in Southern California and the Northeast U.S.

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## Above and beyond

*This year, we asked AIN Product Support Survey participants to list their favorite support personnel and what they like about the service provided. Here are 15 of more than 200 people respondents chose to honor. For the complete list go to [www.ainonline.com/above-beyond-2012](http://www.ainonline.com/above-beyond-2012).*

### Sean Davidson AgustaWestland-Philadelphia

Sean is always available day or night. He always goes the extra mile to ensure that my company and our fleet of three A109Es is supported by every facet of their company. He is always thinking outside the box to come up with a way to fix problems and never leaves any stone unturned. A true asset to Agusta and my program.

### David Van Fleet Bell Helicopter-Piney Flats, Tenn.

He is a master at juggling many projects and seeing they get completed on time at a reasonable cost. He lets the customer know his business is appreciated. He is the type of person you enjoy doing business with because it will be done right and any issues you have will be resolved before you leave.

### Dick Letter Bombardier-Chicago

The best technical representative I have ever worked with; a model of customer service.

### Fred Royce Cessna Aircraft-Wichita

Fred is a dedicated employee who has been in his position for a long time, knows his aircraft and customers and is friendly and easy to deal with. I also believe that he has a good rapport with his mechanics on the floor, who have given us great service over the years.

### Mike Stiemert Comlux Aviation-Indianapolis

Mike is well versed in all aspects of the Challenger series and does what it takes to finish a project on time and under budget.

### Frank Reynolds Dassault Aircraft Services-Little Rock, Ark.

Frank is one of the crew leads at DAS-LIT. He works incredibly long hours to ensure all of the small details are taken care of. His attention to detail is second to none. He takes to heart everything that is happening on the customer’s aircraft. A fine man and a gentleman.

### Rich Jones Duncan Aviation-Battle Creek, Mich.

Rich was extremely thorough, patient and informative on the recent acquisition/pre-buy on our Citation 560XL. I would strongly recommend Duncan and Rich specifically.

### Ken Chitty and Bill Engle Elliott Aviation-Moline, Ill.

Both Ken and Bill do a great job making sure that their customers’ needs are met, any time of day or night. They are both great representatives for Elliott Aviation. Elliott has a great group of people from line, CSRs, techs, all the way up.

### Michael Valek Embraer-Mesa, Ariz.

Mike is by far one of the best tech rep/customer service professionals I have ever worked with. He is a 24/7 kind of guy. Even gave me his home phone number. He is always cheerful, courteous and extremely professional. Always up to date on the latest news and repairs. He has pulled our butts out of many AOG situations. He never says no and never gives up. He is a one-of-a-kind person. I cannot say enough good things about him or his service. Embraer is lucky to have him.

### Mark Solomon Gulfstream-Chicago

Mark has always given us great support, day or night. His expert knowledge of the GIV is outstanding. Not much can stump him. Couple this with a pleasant personality and a sincere interest in solving problems, and he is an invaluable asset to our operation.

### Jason Kopecky Hawker Beechcraft Services-Houston

I have worked with Jason and his team for the past seven years maintaining first our Beechjet and now our Hawker. They have always gone above and beyond to get us in and out as quickly as possible and are great at cost control.

### Reece Howell Howell Enterprises, Smyrna, Tenn.

Outstanding knowledge and service related to buying, owning and training in all MU-2s.

### Samuel Frey Jet Aviation-Basel, Switzerland

He was the man who, under the worst possible weather conditions, did an engine leak check for us so we could do a planned flight with our boss. It was raining like hell and the wind was about 40 knots! Thanks to him we were able to do our flights that day.

### Fabio Conne Pilatus Aircraft-Stans, Switzerland

He keeps track of the maintenance, even if he is not our Camo, helps where he can, is always friendly and seems never to be stressed.

### Wayne Anderson Sikorsky Aircraft-Strafford, Conn.

Always takes the time to listen to our needs as a customer and will do whatever it takes to get us an answer to fix any issues we may have. ■



Mitsubishi MU-2

## What have you done?

► Continued from page 26

While manufacturing activity is down for many manufacturers, Hawker Beechcraft Global Customer Support has invested in modification programs, including the 800XPR and 400XPR, which add new engines and winglets to the 800XP and 400XP. Avionics upgrades are an option for these programs, as are autothrottles, enhanced and synthetic vision systems and air ambulance upgrades.

### Mitsubishi

Mitsubishi’s support for the 40-year-old MU-2 twin turboprops rates highly with MU-2 operators, and the Japanese company remains committed to the airplane. Mitsubishi built 704 MU-2s, and 313 of them remain active. This year, Turbine Aircraft Services, which administers product support for Mitsubishi, helped deliver three MU-2 Pilot’s Review of Proficiency (Prop) seminars. The Prop seminars, sponsored by Mitsubishi Heavy Industries America (MHIA) and training provider SimCom International, are free and held every other year. This year subjects covered included MU-2 maintenance,

safety, training and operational issues, including a presentation on surviving upsets. There are four MU-2 service centers in the U.S., including Intercontinental Jet Services in Tulsa, which is owned by MHIA, one in Nyköping, Sweden, and one in Goiania, Brazil.

### Pilatus

Last September, Pilatus added service letters to its comprehensive volume of online publications for PC-12 owners and operators. The service letters joined other material that was already available free online, including flight manual revisions, service bulletins, maintenance manual Chapters 00, 04 and 05 and third-party documents. Distribution of publications to Western Hemisphere customers is quicker thanks to a new technical publications team based at Pilatus Business Aircraft in Broomfield, Colo. And access to integrated electronic technical publications has been improved with new browser software.

During the past year, Pilatus held seven maintenance and operations seminars and regional operator conferences on five continents and added three new service centers. Pilatus service centers received new fault isolation guides for the PC-12NG and legacy PC-12s and new software-based troubleshooting tools. Pilatus also



Pilatus PC-12



Sikorsky S-92

co-located a field service engineer who specializes in the PC-12NG’s Honeywell Primus Apex avionics suite at the company’s Switzerland and U.S. offices.

### Sabreliner

There are 242 Sabre jets still operating and Sabreliner, which holds the type certificate for the iconic business jet, is not stinting in its efforts to keep all of those jets flying for as long as possible. Recent developments include a new 32,000-sq-ft strip and paint hangar at Sabreliner’s Perryville, Mo. service facility. So far, eight customer jets have been painted at the new hangar.

To keep the fleet of Sabres flying, including the later-model Sabre 65 operated by 59 customers in the U.S., Sabreliner has implemented the comprehensive structural inspection (CSI) program. The first Sabre 65 was inducted about a year ago, and three other customers have signed up since then. The CSI program “guarantees the aircraft will remain free from corrosion for the remainder of aircraft life or Sabreliner will fix [the corrosion] free of charge,” according to the company.

The CSI program begins with an initial baseline inspection, which includes 24-, 36-, 48- and 60-month corrosion inspections, the 150-hour inspection, composite wing overlay inspection and/or replacement and fresh strip and paint. To remain covered by CSI, the customer must have all future structural inspections and any resulting work done by Sabreliner as well as fresh paint every seven years. CSI guarantees that the aircraft will be free from corrosion or Sabreliner will take care of

the problem. The CSI program has a one-time cost for enrollment, but is transferable to a new owner at no cost, according to Sabreliner. There is no ongoing cost as long as the CSI program is followed, although the owner/operator is still responsible for regular structural inspections.

### Sikorsky

In its ongoing effort to lower operating costs of its rotorcraft by 25 percent by 2015, Sikorsky Aerospace Services has identified more than 325 cost-reduction opportunities. The additional benefit of this initiative has been improved aircraft availability, now more than 96 percent “across the fleet for all our products,” according to the company.

S-92 operators are enjoying savings due to part life extensions such as that for the main rotor hub, which has nearly doubled to 9,000 hours from 4,900 hours. “Technology is also currently in development to enhance our ability to detect trends and distinct populations of data,” Sikorsky noted, “which will allow us to replicate demand forecasting techniques to identify repair cost improvement opportunities through our Sikorsky Fleet Maintenance and Operations Center.”

Sikorsky incorporates customer input via forums that include the S-92 Maintenance Review Steering Group, S-92 Flight Operations Group, USA Advisory Users Group and technical forums at the annual Heli-Expo show and bi-annual commercial customer conferences. □

*Airbus and Boeing did not respond to our request for information.*

## iPAD WINNERS

The following people were randomly selected as winners of an Apple iPad for participating in our annual Product Support Survey: **David Nelson**, chief pilot, Sho-Deen, West Chicago, Ill.; **Thomas Butcher**, captain, Western Airways, Sugarland, Texas; **Mark Henry**, chief pilot, Boston Air Charter, Newton, Mass.; **John Morehouse**, director of maintenance, Jeld-Wen Aviation, Klamath Falls, Ore.; and **Troy Eskew**, director of maintenance, M&N Aviation, Casper, Wyo. The iPads come with free subscriptions for the following apps: Wing X (moving map, charts and weather); and Garmin Pilot (plan, file and fly). □



**Garmin Pilot**  
plan, file and fly



**Wing X**  
Moving Map, Charts and Weather