



2013 PRODUCT SUPPORT SURVEY

PART 1 - AIRCRAFT

Gulfstream, Mitsubishi top survey results again

by Matt Thurber

Gulfstream, the longtime leader in the AIN Product Support Survey, scored higher this year with an overall average 8.3 rating for its large-cabin jets (newer and older aircraft), although after a large jump last year, Embraer is creeping even closer to the top spot, up 0.1 to 8.2 from last year's 8.1.

Last year, Cessna claimed the third-place spot with a 7.7 overall average (tied with Bombardier's Challengers), but Bombardier's Learjet division leapfrogged over Cessna this year with a 7.9 that carried Learjet into third place. Nevertheless, Cessna did improve this year to an overall average of 7.8 and fourth place, climbing 0.1 over last year.

Gulfstream's midsize jets climbed by 0.2 points, to 7.7 and fifth place this year, the same position the aircraft held last year. Dassault Falcon's overall average dropped 0.1 to 7.5 this year, not enough to push past Bombardier's Challenger and Global models, which tied at 7.6 and sixth place.

The former Hawker Beechcraft jets dropped to an overall average of 6.9, likely further reflection of the challenges the manufacturer faced as it went through bankruptcy, emerging earlier this year as Beechcraft, no longer a jet maker, and focused on the King Air turboprop twins, piston airplanes and military turboprop trainers. Perhaps reflective of

Beechcraft's renewed focus, the King Air line saw a 0.2 point improvement from last year, with this year's overall average at 7.2. That still wasn't enough to move up from third place, however.

Pilatus Aircraft saw a significant jump in its overall average, up half a point to 7.9 from last year's 7.4, but still not enough to budge turboprop-category favorite Mitsubishi off its longtime first-place perch. This year, the MU-2 manufacturer's overall average climbed 0.1 to 9.4, the highest rating received by any aircraft manufacturer in the 2013 survey.

In the rotorcraft arena, overall averages in this year's survey unaccountably dropped, but Bell Helicopter retained its lead with a rating of 7.1, followed by AgustaWestland at 6.5, both enjoying the same ranking as last year. Sikorsky and Eurocopter switched places, with Sikorsky moving up to third place and Eurocopter dropping to fourth.

While there are other manufacturers of jets and pressurized turboprops, not enough ratings were received from AIN readers to include them in the overall average results. Some of these manufacturers did, however, respond to AIN's request for information about product-support improvements, and these are covered in the "Manufacturers outline support improvements" story on page 22.



Newer Business Jets

The first five manufacturers in this category match the lineup in the overall averages for all jets, with four out of the five seeing ratings improvements over last year and Cessna receiving the same rating.

Dassault Falcon garnered fifth place in the Newer Business Jets category, followed by Bombardier's Challengers and Globals. Hawker Beechcraft models saw a further drop in overall ratings for Newer Jets.

Older Business Jets

Gulfstream also retained its lead in the Older Business Jets category, with an 8.1 overall average, down 0.1 from last year's 8.2. Bombardier made a significant move into second place, with all three marques tied for the same 7.7 rating. (Last year the Global series did not receive enough ratings for inclusion, hence the N/A in the 2012 column.) The Challenger series retained its

7.7 rating, while Learjet jumped from last year's 7.1 to 7.7, a solid move that likely reflects Bombardier's continuing efforts at improving product support for all customers, not just for operators of newer jets.

Cessna's Citations showed a clear move in the right direction, tying in second on place at 7.7. Dassault Falcon came in third with 7.4, the same rating as 2012, but up from last year's fifth place ranking. Hawker jets improved: to 7.2 from 7.0, while the rating for the former Hawker Beechcraft's smaller jets dropped to 7.0 from 7.3.

INSIDE:

- Overall Average Ratings20
- 2013 Category Ratings.....21
- OEMs Outline Support Improvements.....22
- Methodology22
- Above and Beyond28

Combined Overall Average Ratings of Newer and Older Aircraft

The chart below provides the overall average rating of each manufacturer when the newer and older aircraft scores are combined. This gives OEMs and readers a glimpse of a manufacturer's overall support ratings for all its products. The chart is broken down by jets and turboprops, as the level of service and support can vary widely between the two segments.

	Overall Average 2013	Overall Average 2012	Rating Change from 2012-2013
Jets			
Gulfstream (GII-GV, G300-G650)	8.3	8.2	0.1
Embraer (Phenom, Legacy, Lineage)	8.2	8.1	0.1
Bombardier (Learjet)	7.9	7.4	0.5
Cessna (Citation)	7.8	7.7	0.1
Gulfstream (Astra, G100-G280)	7.7	7.5	0.2
Bombardier (Challenger)	7.6	7.7	0.1
Bombardier (Global)	7.6	7.4	0.2
Dassault (Falcon)	7.5	7.6	0.1
Hawker Beechcraft (Diamond, Premier, Beechjet 400/400A, Hawker 400XP)	6.9	7.2	0.3
Hawker Beechcraft (Hawker)	6.9	7.1	0.2
Turboprops			
Mitsubishi (MU-2, Solitaire, Marquise)	9.4	9.3	0.1
Pilatus (PC-12)	7.9	7.4	0.5
Beechcraft (King Air)	7.2	7.0	0.2

Listed in order of the 2013 overall average (ties are listed alphabetically) **Bold** indicates highest number in each category.

Newer and Older Turboprops

Only two manufacturers of newer turboprops, Pilatus and Beechcraft, received enough ratings to be included in this year's AIN Product Support Survey results. Both companies saw a rise in their overall averages, with Pilatus climbing to 7.9 from 7.6 and Beechcraft seeing a half-point improvement to 7.7.

Mitsubishi retained its lead in older turboprops, climbing slightly to 9.4, while Beechcraft saw a 0.2-point improvement to 7.1. Pilatus doesn't appear in the

Older Turboprops results because not enough AIN readers submitted ratings for older PC-12s.

Rating the Categories

The factors that drive the overall average rating for each manufacturer or a manufacturer's aircraft series derive from the 10 categories that AIN readers rate for the aircraft they operate. Looking at these categories (see chart below) reveals specific areas where operators see deficiencies and strengths in the support provided by the aircraft manufacturers.

Major contributors to Gulf-

stream's high scores for its newer jets are its 9.3 ratings for overall aircraft reliability and technical representatives. The company also scored strongly in the warranty fulfillment, AOG response, parts availability and factory-owned service centers categories.

Most manufacturers score low—every year—on cost of parts. In this category, Embraer received the highest rating at 7.0, which is 0.2 points higher than last year's high-scorer, Cessna.

Among older jets, Bombardier's Globals scored the highest rating, a 9.5 for technical representatives. Gulfstream rated a



9.1 for overall aircraft reliability and relatively high scores in most other categories. The lowest ratings for technical representatives in the Older Jets section were 8.0,

indicating that operators are fairly happy with the support provided by their first point of contact at the manufacturers. Report continues on next page ▶

2013 CATEGORY RATINGS

	Overall Average 2013	Overall Average 2012	Rating Change from 2012 to 2013	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
NEWER BUSINESS JETS													
Gulfstream (G300-G650)	8.5	8.3	0.2	8.4	7.5	8.6	6.4	9.0	8.8	8.4	9.3	8.8	9.3
Embraer (Phenom, Legacy, Lineage)	8.2	8.0	0.2	7.8	7.8	8.2	7.0	8.5	8.5	8.6	8.9	8.1	8.6
Bombardier (Learjet)	8.0	7.9	0.1	7.6	7.7	7.8	6.7	8.0	8.4	8.1	8.8	8.2	8.4
Cessna (Citation)	8.0	8.0	0.0	7.8	7.3	8.1	6.6	8.1	8.2	8.2	8.4	8.3	8.4
Gulfstream (G100-G280)	7.8	7.6	0.2	7.5	6.7	7.4	6.4	8.1	8.8	7.4	8.4	8.5	8.4
Dassault (Falcon)	7.7	7.8	-0.1	7.0	7.7	7.9	6.0	7.9	8.2	7.5	8.3	7.6	8.5
Bombardier (Challenger)	7.6	7.7	-0.1	7.1	7.0	7.3	6.2	7.6	8.1	7.6	8.6	7.7	8.4
Bombardier (Global)	7.6	7.5	0.1	7.3	7.3	7.4	5.8	7.8	7.9	7.8	8.3	8.0	8.2
Hawker Beechcraft (Premier, Beechjet 400/400A, Hawker 400XP)	6.8	7.1	-0.3	6.9	6.2	6.3	5.7	7.1	5.5	6.4	7.7	7.8	7.8
Hawker Beechcraft (Hawker)	6.7	7.2	-0.5	6.7	5.8	6.0	6.1	5.9	6.3	7.2	6.9	7.7	7.9
OLDER BUSINESS JETS													
Gulfstream (GII-GV, G300-G550)	8.1	8.2	-0.1	8.0	7.6	8.3	6.0	8.6	7.8	8.3	8.5	8.5	9.1
Bombardier (Challenger)	7.7	7.7	0.0	6.8	7.3	7.7	6.5	8.0	7.7	8.1	8.0	8.3	8.7
Bombardier (Global)	7.7	N/A	N/A	6.8	7.2	7.1	6.1	7.9	7.5	8.0	9.5	8.4	8.3
Bombardier (Learjet)	7.7	7.1	0.6	7.9	7.7	7.7	5.7	7.7	7.2	8.2	8.5	7.9	8.3
Cessna (Citation)	7.7	7.4	0.3	7.1	7.2	7.9	6.0	7.9	7.7	7.9	8.1	7.9	8.5
Dassault (Falcon)	7.4	7.4	0.0	6.3	7.3	7.6	5.6	7.6	7.2	7.5	8.1	7.6	8.6
Hawker Beechcraft (Hawker)	7.2	7.0	0.2	6.3	6.7	6.5	5.3	7.3	7.6	7.5	8.0	8.2	8.4
Hawker Beechcraft (Diamond, Premier, Beechjet 400/400A, Hawker 400XP)	7.0	7.3	-0.3	6.4	7.2	6.7	5.5	6.4	7.1	6.8	8.1	8.1	7.7
NEWER TURBOPROPS													
Pilatus (PC-12)	7.9	7.6	0.3	5.7	6.5	8.4	6.3	7.7	8.5	8.6	8.6	8.6	9.0
Beechcraft (King Air)	7.7	7.2	0.5	7.1	6.4	7.7	6.1	7.2	7.6	8.2	8.6	7.7	8.9
OLDER TURBOPROPS													
Mitsubishi (MU-2, Solitaire, Marquise)	9.4	9.3	0.1	9.6	9.6	9.6	8.2	9.8	9.6	9.3	9.7	9.2	9.9
Beechcraft (King Air)	7.1	6.9	0.2	6.2	6.6	7.4	5.4	7.0	6.8	7.7	7.6	6.8	8.1
ROTORCRAFT (All Ages)													
Bell	7.1	7.8	-0.7	5.3	4.8	7.1	6.0	7.6	7.0	8.1	8.3	7.6	8.1
AgustaWestland	6.5	6.8	-0.3	6.1	5.9	5.9	5.2	6.3	7.3	7.0	7.6	5.9	7.1
Sikorsky	6.3	6.6	-0.3	5.6	5.4	5.6	5.3	5.7	6.3	6.3	7.2	7.0	7.7
Eurocopter	5.5	6.7	-1.2	3.8	5.2	5.1	4.4	4.9	5.1	6.2	6.4	6.0	7.1

Listed in order of the 2013 overall average (ties are listed alphabetically). Rotorcraft ratings are based on all ages of rotorcraft. **Bold** indicates highest number in each category.



SURVEY METHODOLOGY

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

This 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 questionnaire. Qualified readers for whom we did not have an email address were sent postcards with the same link. In total, 21,592 readers were invited to participate in the survey.

The survey website was open from May 1 to June 14. 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:

- **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 people is available online at www.ainonline.com/above-beyond-2013.

The 2013 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/online development, at dleach@ainonline.com. —R.R.P.

Manufacturers outline support improvements

by Matt Thurber

In the perennial battle to keep customers so happy that they remain in the same manufacturer family when it comes time to buy a new airplane, original equipment manufacturers (OEMs) continue to improve the services they provide. Every year AIN asks OEMs to provide an update on improvements to their product support services, and following are summaries from information provided by those OEMs that responded to the request or in some cases based on information released during the past year.

AIRPLANES

Beechcraft

Beechcraft emerged from bankruptcy in February as manufacturer of the King Air turboprops, Bonanza and Baron piston airplanes and special-mission King Airs and single-engine military trainers. The company's product-support efforts are embodied in the Global Customer Support (GCS) organization, which includes factory-owned Hawker

Beechcraft Services maintenance facilities, the authorized service center network and aftermarket modification programs such as the 800XPR and 400XPR. The Hawker Beechcraft Services facilities offer maintenance on all the company's products, including the jets that it no longer manufactures (Hawker 400, 800/900 and 4000 and Premier).

GCS opened two new Hawker Beechcraft Services facilities since July last year, one in Wilmington, Del., and another in Monterrey, Mexico. In addition to maintenance and avionics services, the Wilmington facility houses a mobile support team and the Mexico center provides interior modifications and exterior paint. Five new authorized service centers were appointed during the past year, in Bogotá, Colombia; Curitiba, Brazil; Phoenix, Ariz.; Peterborough, Canada; and Farnborough, UK.

GCS is also active in the aftermarket, offering the 400XPR and 800XPR modification programs for the Beechjet/

SURVEY BY THE NUMBERS	
Respondents who provided some survey data	1,197
Respondents who completed the survey in its entirety	1,064
Aircraft rated	2,334
Aircraft models receiving ratings	178
Minimum ratings required to be included in data*	20
Respondents who rated aircraft	1,185

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

Hawker 400 and Hawker 800 models. Other GCS programs include the synthetic vision upgrade to the Rockwell Collins Pro Line 21 system in the King Air 200/300 series; Blackhawk engine upgrades on the Pro Line 21-equipped King Air 200; and installation of CenTex Halo 250 mods for King Air 200s.

Bombardier

"The world has changed," said Eric Martel, Bombardier president of customer services and specialized and amphibious aircraft. Whereas 10 years ago Bombardier's business aviation fleet stood at about 2,500 airplanes, with 80 percent of those located in North America, the fleet has grown to 4,000 airplanes, 40 percent of which are located around the world, primarily in Europe, Asia and Africa. Now Bombardier has to expend much more effort to support aircraft worldwide. "Of course it's putting tremendous pressure on us, but we're up to the challenge," he said.

In the past 12 months Bombardier has added nine new authorized service facilities and the number of non-Bombardier-owned centers now

Martel said, close to customers. "It's important that people don't have to wait for North America to open to get a decision made." Each RSO is staffed with field service representatives, liaison pilots and parts service experts.

The parts depot in Frankfurt has been upgraded to have the same capability as Bombardier's main warehouse in Chicago, which means accepting returns and exchanges and receiving shipments directly from vendors. The Dubai parts warehouse has moved into a new and larger facility.

Finally, Bombardier introduced the new Smart Parts Preferred program, with longer-term price commitments, more component coverage, simplified administration and enhanced program transfer features, according to Bombardier.

Cessna

Cessna has expanded service capabilities and now offers AOG services for Caravan turboprop single operators at its 13 factory-owned service centers worldwide. Since July last year, Caravan operators can sign up for ProAdvantage programs, which cover parts and maintenance.

The company's first factory service center in the UK, at Robin Hood Airport in Doncaster, opened in September, following the acquisition of the former Kinch Aviation Cessna authorized service facility. The Doncaster operation is Cessna's fourth factory-owned service center in Europe. The company also has facilities in Valencia, Spain; Paris; and Prague, Czech Republic. The Valencia facility opened on September 17. Earlier last year, Cessna and sister company Bell Helicopter opened a joint regional service center at Seletar Aerospace Park in Singapore.

The number of Cessna mobile service units grew to 22 worldwide during the past year. There are now 18 mobile units in the U.S. and four in Canada and Europe. Capable of performing scheduled maintenance events and other services, the mobile units are part of Cessna's ServiceDirect initiative. ServiceDirect includes AOG go teams, an air response team, HomeService (assistance with long-term dedicated support at the customer's facility) and temporary personnel support (supplying technicians to assist during large maintenance events).

Report continues on page 24 ▶



▶ Continued from page 22

Daher-Socata

Daher-Socata approved four new service centers this year to support the 630 TBM 700/850 single-engine turboprops that it has delivered. In June, the fleet hours reached more than 1.1 million. The new service centers are in Monterrey, Mexico; Lodz, Poland; Casablanca, Morocco; and Bankstown, Australia, and now there are 13 in the U.S. and 30 worldwide.

Buyers of 2013 TBM 850s get the L-3 Avionics ESI-2000 electronic standby instrument as standard equipment, and Daher-Socata is offering a retrofit of the ESI-2000 for older models. To help owners make the move to replace the three electro-mechanical instruments with the ESI-2000, Daher-Socata is offering to buy back the old instruments "for the first group of customers who commit to this modification."

New this year is Daher-Socata's new maintenance program (NMP), which extends recommended maintenance intervals to 200 hours or 12 months, double the previous 100 hours. While the NMP is included with new TBM 850s, older 700s and 850s can transition to the NMP at their next annual inspection.

Maintenance tracking for TBM owners is now offered through a partnership with Camp Systems, and this includes Camp's Trend Group engine health monitoring services. All services on the mysocata.com website are available on Apple iPads and Android devices. A new feature is the display of images alongside parts in the price catalog, along with suggested retail prices. The images should help prevent erroneous orders, according to Daher-Socata.

Dassault Falcon

A major area of focus for Dassault Falcon during the past year was lowering the cost of spare parts, and the company has done so for more than

32,000 parts. Part of the reason that customers complain about parts prices, however, is that they perceive that prices are too high, based on their assessment of the part makeup. As Jacques Chauvet, senior v-p of customer service, put it, "As much as we've reduced prices, the perception is still that in some instances they remain too high. Nearly everyone has an example of a part whose size, technology or material of construction suggests one level of price but the invoice turns out to be quite expensive, leaving the customer perplexed."

To combat this perception, Dassault Falcon implemented "rightsized pricing," which doesn't just price parts according to how much they cost to manufacture or purchase from vendors but also takes into account customer perceptions of the



FALCON FACTORY SERVICE CENTER

parts' value. According to the company, "Rightsized pricing will put perceived value at the center of the equation. It will involve a review and realignment of pricing for a certain number of Dassault Falcon parts references to eliminate inconsistencies and make the process more transparent to customers."

This year Dassault Falcon added more parts inventory in China and India, to support new customers in those regions. The company partnered with distributor Aerospace Products International in an expanded logistics services agreement, which supports customers in

China, Hong Kong and Macau from a distribution center in Shanghai. Key Falcon spares depots are located in Teterboro, N.J., Paris and Singapore, and there are 10 other depots around the world, helping the company achieve "98-percent spares service level for all shipments for several years running."

Earlier this year, Dassault Aircraft Services opened a new satellite service station in Van Nuys, Calif., including a mobile AOG go team truck to support customers in the Southwest U.S. Dassault now has five factory-owned service centers worldwide and seven satellite stations. In addition, a new subsidiary, Dassault Falcon Business Services (Beijing), opened in April. This facility is supplemented by Dassault Falcon's new regional customer ser-



EMBRAER CONTACT CENTER

vice headquarters in Beijing, which began operating on June 1. Operators closer to Shanghai can have their Falcons serviced at Dassault Falcon Aircraft Services-China at Shanghai's Hongqiao International Airport.

For operators of Falcon 2000s and 900s with the EASy cockpit, the FalconBroadcast airborne health monitoring system is now available. FalconBroadcast was introduced on the 7X in the middle of last year and allows operators to communicate maintenance issues to appropriate parties on the ground to help expedite troubleshooting and problem resolution.

Eclipse

Support for the 260 Eclipse 500s built continues to improve, and this year Eclipse Aerospace is resuming production of the very light twinjet, in the form of the new Eclipse 550.

The company reports improvement in parts delivery performance, with 91 percent of all parts orders shipped the same day and a record 99 percent achieved in May. Warranty on most replacement parts has been "significantly increased," according to Eclipse. Crownair Aviation in San Diego joins the service center network, covering the Western U.S.

A key limitation on the Eclipse airframe has been resolved, with the service life now doubled to 20,000 hours and 20,000 cycles

On the parts side, Embraer has added to worldwide inventories, including more material at 55 authorized service centers. Prices were reduced on many components, according to Embraer, following a review of the parts price policy strategy, "and the escalation average in 2013 is below the escalation indices." West Coast Embraer operators have access to more parts, thanks to a new distribution center in Las Vegas.

As certification of the Legacy 500 nears, Embraer is preparing its Aircraft Health and Advanced Diagnosis (Ahead Pro) system for the new jet. Phenom 100 and 300 operators will be able to start using Ahead by the third quarter. Phenom owners can sign up for the Embraer Executive Care engine add-on option, which complements the Executive Care and Pratt & Whitney Canada Eagle Service Plan programs, according to Embraer. For European operators, Embraer offers a new airworthiness management service, under which operators can delegate airworthiness management to Embraer, and Embraer provides customers with a single point of contact and personal consultant.

Gulfstream

With the G650 and G280 entering service last year, Gulfstream has added \$200 million worth of parts and materials to its worldwide stocks since June 2012, bringing the total inventory to about \$1.4 billion. To improve delivery times and communication with customers, Gulfstream has added a parts backorder process. Customers can now purchase parts and materials over-the-counter from Gulfstream using a new online quoting system. More than 200,000 hours of hands-on technician training was accomplished on the G650 and G280 during the second half of last year.

Business is booming at Gulfstream's factory-owned service center network. The Westfield, Mass. facility saw the addition of a new 125,000-sq-ft hangar that nearly doubled the under-roof capacity. With a new overnight shift from 10 p.m. to 8:30 a.m. five days a week, Westfield has added 60 jobs and plans another 40 by year-end.

In Appleton, Wis., the Gulfstream facility is adding 100 jobs (65 of them were filled by early June), all to support

Report continues on page 26 ▶



BEECHCRAFT MOBILE SERVICE UNIT

GULFSTREAM AIRBORNE SUPPORT



► Continued from page 24

growing volume in completions work, according to Gulfstream.

The new Gulfstream Beijing service center began operating late last year and is approved as a Part 145 repair station by China's regulators, allowing the facility to provide maintenance on Chinese-registered Gulfstreams. To further assist Gulfstream's Chinese customers, the Long Beach, Calif., facility has hired Mandarin- and Cantonese-speaking service center coordinators.

At the Brunswick, Ga. service/completions center, Gulfstream is in the process of adding 35 positions, 30 of which had been filled by early June. The Dallas service/completions center has also hired more technicians to handle new business and staff the facility's new wheel and brake shop.

Gulfstream's field and airborne support teams (Fast) can reach customers in AOG situations more quickly, thanks to replacement of the Fast aircraft unit's two G100s with G150s. Fast engineers were added in Kiev and Paris to bolster



European support. And at the Westfield and Houston facilities, Gulfstream positioned new Fast vehicles equipped with tools, parts, generator, hydraulic mule, air compressor and aircraft jacks.

Gulfstream customers that use the CMP.net maintenance-tracking service can now access their data using an iPad version of the software, introduced last October.

Mitsubishi

Mitsubishi Heavy Industries, the Japanese manufacturer of the twin-turboprop MU-2, continues its strong support, via an agreement with Turbine Aircraft Services of Dallas, which provides the MU-2 community with parts, maintenance documents and information about service and operational changes.

Mitsubishi Heavy Industries America (MHIA) and training provider SimCom International sponsor the free Pilot's Review of Proficiency seminars every two (even) years during April and May, and last year four events were held. While the MU-2 has been out of production since 1985, a third of the attendees at Prop 2012 were first-time owner-operators, and 20 prospective buyers showed up to learn more about the MU-2. Four Prop seminars are scheduled for next year, in Dallas, Phoenix, Orlando and Columbus, Ohio. According to MHIA, 704 MU-2s were produced and 301 are still active.

MHIA, Turbine Aircraft Services and SimCom worked together to add another MU-2 flight training device certified to Level 5 with full visual system and two different cockpit configurations to give pilots more training options.

Pilatus Aircraft

During the past year, Pilatus has held 10 maintenance and operations seminars and regional operator conferences worldwide. Meetings in Brazil and Mexico were added, too. The company appointed a new Pilatus sales and service center (Tronrud Aviation in Norway) and three

new satellite service centers (Million Air Houston, Northern Air of Grand Rapids, Mich., and Landmark Aviation, Scottsdale, Ariz.) during the past year.

To make working with Pilatus easier, the company introduced an electronic payment system for all technical publications. The 700th customer has opened a MyPilatus account. And Pilatus has created an online parts sales portal for North and South American service centers.

New products for PC-12 operators include the PC-12 NG Connected Flight Deck with wireless Fastload system, which will make loading navigation databases much easier. The Garmin G600 New Perspective avionics system is now available for retrofit on older (non-NG) PC-12s.

Piper

Operators of Piper's Meridian turboprop single have seen improvements in parts availability, with 20-percent additional inventory worldwide, according to Piper Aircraft, and "increased stocking levels based on global usage." Piper has created a "mission-critical list for active production models," and also is stocking more parts closer to customers using Aviall's distribution network. Piper has 38 international service centers and 42 in the U.S.

Sabreliner

The 50-year-old Sabreliner line of business jets continues flying, with more than 400 manufactured and currently 18 companies having operated Sabre jets for 25 years or more, according to Sabreliner Corp. Owners and operators have access to dedicated Sabreliner technicians and customer support staff and, the company noted, "Phones are answered by human beings around the clock and expert troubleshooting and AOG support are always available."

Sabreliner offers upgrades and maintenance support. A recent upgrade is dual Universal Avionics UNS-1LW flight management systems with coupled vertical approach capability for the Sabre 65. After completing the comprehensive structural inspection program, Sabre 65 operators never have to pay for corrosion repairs "as long as they own the aircraft," according to Sabreliner. To maintain coverage under the program, owners and operators need to have a Sabreliner technician inspect their jet once a year.

At Sabreliner's Perryville, Mo. facility, the paint shop features new technology that "results in a longer-lasting and glossier finish," according to the company, "and it also allows Sabreliner to offer some of the most competitive pricing in the industry." The improvements include an integrated and climate-controlled facility, with precise control of temperature and humidity levels and smart lighting to help ensure paint uniformity. Sabreliner paint technicians spray with Graco Pro Xs4 electrostatic spray guns, which use much less paint than standard guns and also reduce ozone-depleting emissions by about 35 percent.

Twin Commander

Twin Commander Aircraft supports the remaining fleet of Twin Commander twin turboprops and piston twins, developing new products and fixes to keep them flying efficiently and long into the future. Owned by Firstmark since 2008, Twin Commander Aircraft recently introduced four new hardware kits for the twins. These include a kit to replace Weldon fuel pumps with Parker Airborne pumps, new main landing-gear linkage parts, new center fuel-tank liner fasteners and a new oxygen-bottle fill port. "They're small, but still important for the Commander fleet," said a Twin Commander spokesman.

In April, Twin Commander held its annual Twin Commander University, with 72 attendees sharing information and learning about new techniques and products.

Twin Commander service center Eagle Creek Aviation is developing a Garmin G1000 installation package for the Twin Commander turboprops. By combining the new avionics with the Grand Renaissance airframe refurbishment package and the Honeywell TPE331-10 engine upgrade, "You end up with an airplane that is contemporary in terms of sophistication and performance. The focus of the company is to keep the airplanes viable and state of the art as possible," the spokesman said.

There are 19 Twin Commander service centers worldwide, and a big job for these is the Service Bulletin 241 (FAA AD 2013-09-05) inspection and modification to the aft pressure bulkhead. In partnership with FlightSafety and Eagle Creek, Twin Commander is developing a new technician training program. The program will first focus on teaching technicians how to accomplish the SB241 mods, then later other Twin Commander technical training, using experienced technicians from Eagle Creek to provide the training.

HELICOPTERS

AgustaWestland

AgustaWestland has introduced what it calls "an all-new concept and approach to support and maintenance." For operators of at least two of the three-family AW139, AW169 and AW189 models, maintenance costs will be lower because of component commonalities (up to 20 percent), cockpit layout and tools/maintenance equipment (up to 30 percent) and new levels of cost effectiveness and flexibility, according to AgustaWestland.

Now with nearly 90 authorized service centers worldwide, AgustaWestland added UT Air of Russia as well as new centers in the U.S., Canada, Chile and Nigeria, among others, during the past year. AgustaWestland has integrated "support

Report continues on page 28 ►



© 2013 AIN Publications. All Rights Reserved. For Reprints go to www.ainonline.com



AGUSTAWESTLAND

► Continued from page 26

and training within the organization to further enhance its partnership with customers," according to the company. Support and training accounts for 40 percent of total AgustaWestland revenues.

Bell

Bell Helicopter is expanding its service center capabilities in China with the addition of two new authorized customer facilities in Shanghai and Guangzhou. Bell also received Part 145 maintenance organization approval from the Civil Aviation Authority of Singapore for Bell Helicopter Asia. In the Czech Republic, Aviation Service can now perform major changes on primary structure and cabin interiors of Bell helicopters under expanded and updated terms of its EASA design organization approval. A new Bell mobile service truck is based in Fort Lauderdale, Fla., under a pilot program launched with Bell sister company Cessna Aircraft.

Bell continues to work to help operators lower the direct maintenance cost of flying their helicopters, and so far the company has achieved a 14-percent reduction in parts costs on the 206L-4 and a 22-percent

reduction on the 407. Another key effort to lower costs is a new memorandum of understanding for Van Horn Aviation to develop composite tail-rotor blades for the Bell 212 and 412.

Eurocopter

Eurocopter has applied lean processes to re-engineer the customer-support operation to improve efficiency, increase performance and boost responsiveness. The first application of the lean process was on the NH90 military helicopter, where Eurocopter achieved a 30-percent reduction in repair time for certain NH90 equipment. The next helicopter to get the lean process treatment will be the EC175, then the new processes will be applied to the rest of the Eurocopter family.

For fleet operators, Eurocopter is offering performance-based contracts, which guarantee fleet operability, according to the company, "ensuring operators will be able to fly their missions with a mutually agreed level of aircraft availability." The first customer to experience the effectiveness of the new performance-based contracts was a government; Eurocopter is now offering the service for civil and parapublic operators.

Eurocopter has added to parts inventories in Brazil, Hong Kong and Aberdeen, Scotland, to serve operators in those regions. Maintenance, repair and overhaul (MRO) resources have been added in Brazil, Australia and Malaysia, and Eurocopter has increased the number of authorized service centers for its helicopters.

Vector Aerospace, which Eurocopter purchased in 2011, has added new MRO capabilities, including major inspection, upgrade and retrofit on the AS332, EC135 and EC145.

Sikorsky

Sikorsky Aerospace Services is taking advantage of the health and usage monitoring system (Hums) data generated by onboard systems installed on the S-92. In what it claims is an industry first, Sikorsky received FAA approval for a longer life for the S-92 main rotor hub based on component usage from data recorded by the Hums. "This innovative application paves the way for potential future part life extensions that are based on actual versus engineering-estimated part lives, resulting in direct operating cost reductions for customers," according to Sikorsky.

Hums data also supports an effort to reduce turnaround times between flights, by transmitting Hums data to ground stations and mobile devices, which then "convert data into actionable information."

Sikorsky's Fleet Maintenance and Operations Center uses operational, maintenance and material support information, in partnership with operators, to further develop availability and cost-reduction projects. Sikorsky is also improving forecasting techniques, consignment inventory reallocation and continued component reliability improvement initiatives through "development and application of aircraft availability algorithms," the company stated. □

iPad Winners
The following people were randomly selected as winners of an Apple iPad for participating in our annual Product Support Survey: **Ronald Zahoryn**, aviation manager, Van Nuys, Calif.; **Brian Stinson**, director of maintenance, Southern Tire Aviation, Hattiesburg, Ms.; **Joseph Statt**, chief pilot, Scottsdale Hangar One, Scottsdale, Ariz.; **Nelson Foote**, director of maintenance, TPS, Seattle; and **Bruce Edgerton**, lead tech, Coventry First, Ewing, N.J. ■

AIN readers honor those who go above and beyond

by Matt Thurber

We asked AIN Product Support Survey participants to list their favorite support personnel and what they like about the service provided. Here are some of the people respondents chose to recognize. For the complete list go to www.ainonline.com/above-beyond-2013.

Chris Richard

Bombardier

Our field service representative, Chris Richard, continues to be a pillar of the Bombardier customer support brand and always comes through for our operation.

Paul Howell

Bombardier

My local tech rep, Paul Howell, is the best I've seen in the business. He won't quit and pulls out all the stops for each and every problem.

Elisio Cruz and Paulo Rodrigues

Bombardier

Elisio Cruz, our field service representative, and Paulo Rodrigues, our regional support office chief, are outstanding professionals, always concerned about finding the best solutions for the customers and for the best operational and maintenance aspects of each aircraft. Congratulations to the OEM for having both as part of the team.

Joe Hepburn, J.D. Terry, Jeff Johnson

Cessna

Joe Hepburn, J.D. Terry, Jeff Johnson and all the team at Citation customer support, as well as all the team at Cessna Service Parts & Programs, do a great job for us.

Chris Webber, Tony Herschberger, Chris Worrell, Walt Glosston

Cessna

Team Mustang is through the roof in service, knowledge, response time and can-do attitude. Chris Webber, Tony Herschberger, Chris Worrell and Walt Glosston are available 24/7 and are invaluable in troubleshooting and problem solving, particularly identifying those situations where one may wait at a service center, saving time and money for the owner. These guys rate 11 on a scale of 0-10.

Rick Hoisington

Cessna

I won't buy another aircraft unless it comes with its own Hoisington. Seriously, it's a safety issue. Having Rick always available is as good as it gets.

Rennie Reynolds

Dassault Falcon

You can't find better technicians anywhere in any facility. Rennie Reynolds is the best there is.

Scott Bohl, Hank Hillsman, Jeff McClain

Dassault Falcon

Excellent, and the help desk is a great asset. Scott Bohl and Hank Hillsman have been great to work with. Also Jeff McClain as our customer rep has been very helpful.

Sean Peterson

Embraer

I have tremendous respect for Sean Peterson, who has been very helpful and is basically our go-to guy.

Jim Doyle

Embraer

Jim Doyle is knowledgeable, available and very helpful.

Jim Beebe

Gulfstream

Jim Beebe from Gulfstream is the best. Top notch in knowledge and willingness to help.

David Pérez

Gulfstream

Very happy with our rep in Madrid, David Pérez, [who is] always available and supporting our operation. He is an ace as a rep.

Dallas Gumm

Gulfstream

Dallas Gumm has got to be the best [field service representative] in the business.

John Frees

Hawker Beechcraft (now Beechcraft)

Our tech rep, John Frees, was always there for us. Day and night, always going above and beyond.

Robert Lawson, Gregg Chimich

Hawker Beechcraft (now Beechcraft)

Robert Lawson provides great support. Gregg Chimich in Wichita is the best in the business. □

© 2013 AIN Publications. All Rights Reserved. For Reprints go to www.ainonline.com