

# AIN 2010

## Product Support Survey

PART ONE • AIRCRAFT

by Matt Thurber



Gulfstream once again takes the number one slot for jets (those built in the U.S.); Hawker Beechcraft takes the top spot among newer turboprops and Bell claims the number one rating among helicopters.

**G**ulfstream took the lead again in the annual AIN Product Support Survey, coming out ahead in both the newer and older (more than 10 years old) categories and also in the combined newer and older aircraft. Bombardier's ratings for all models climbed over last year's.

Although the company ranked low in the newer and older jet categories, its improved scores may reflect that it dropped a controversial program under which customers flying older aircraft had to pay extra fees for product support of classic aircraft. The model with the largest percentage growth in rankings compared to last year is Bombardier's newer Learjets, up 7.61 percent, to 7.95.

One change this year involved realigning the Gulfstream models to reflect their pedigree more accurately. Now the U.S.-built large-cabin Gulfstream jets (GII through G550) and the Israel Aerospace Industries-built models (Astra, Galaxy, G100 to G200) are clearly separated. The realignment means that last year's Gulfstream numbers are not compared to this year's rankings.

For newer business jets, Gulfstream's large-cabin models topped the rankings at 8.31, followed by Cessna's Citations, up more than 5 percent, to 8.22. Bombardier's Learjet line made a big leap this year to third place, moving past last year's finish behind Dassault Falcon, Hawker Beechcraft (Premier, etc.) and the Challenger line. Bombardier's Global line also saw a healthy jump of more than 6 percent this year, to 7.16.

In fourth place this year is Gulfstream for its IAI-built jets, at 7.75, followed by Dassault Falcon in fifth place at 7.68. Hawker Beechcraft's newer jets climbed strongly to 7.66 this year, up by more than 5 percent.

Unfortunately, we did not receive enough responses this year to include all of the turboprops. Mitsubishi's MU-2 held its lead with a small jump to 8.90, Hawker Beechcraft's newer King Airs climbed almost 3 percent this year, to 7.61, while its older models declined by more than 3 percent, to 6.82.

Helicopters saw big gains this year, with Bell again at the forefront with a 13.5-percent jump to 7.91. AgustaWestland climbed more than 9 percent to 7.48, while Sikorsky edged up 3 percent to 7.09. Eurocopter's ranking dropped this year by about 5 percent, to 6.17.

It is interesting to see that in all the aircraft categories overall aircraft reliability is the predominant high-scoring ranking for all the manufacturers. In the newer jet category, however, Bombardier Learjet scored highest for technical reps, and the Global series ranked much higher when comparing technical reps with overall reliability. Among many of the other jet manufacturers, technical reps received the second-highest score, which shows not only that the reps are doing a good job but also how important they are in the product support spectrum. With business aircraft, the personal touch is clearly critical.

What about the lowest rankings? As is always the case, cost of parts received the lowest scores for every manufacturer, for both newer and older jets, turboprops and helicopters, except AgustaWestland. □

All the reader comments about product support are available online at [www.ainonline.com/resource-center/](http://www.ainonline.com/resource-center/)

The results of the avionics survey will run next month; the engine results will run in the October issue.



### Overall Average Ratings of Newer and Older Aircraft Combined (in order of 2010 ratings)

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 2010	Overall Average 2009	Rating Change from '09 to '10	% Change
<b>JETS</b>				
Gulfstream (GII through G550)	8.23	N/app.	N/app.	N/app.
Cessna (Citation)	7.91	7.65	0.25	3.33%
Gulfstream (Astra, Galaxy, G100, G200)	7.76	N/app.	N/app.	N/app.
Bombardier (Learjet)	7.69	7.26	0.43	5.93%
Dassault (Falcon)	7.64	7.38	0.26	3.53%
Hawker Beechcraft (Hawker except 400XP)	7.44	7.19	0.25	3.43%
Bombardier (Challenger)	7.41	7.16	0.25	3.48%
Boeing (BBJ)	7.37	7.80	-0.43	-5.53%
Hawker Beechcraft (Premier I, Diamond, Beechjet 400A, Hawker 400XP)	7.19	7.04	0.16	2.23%
Bombardier (Global Express/XRS, Global 5000)	7.18	6.73	0.45	6.67%
<b>TURBOPROPS</b>				
Mitsubishi (Marquise, MU-2, Solitaire)	8.90	8.81	0.09	1.02%
Hawker Beechcraft (King Air)	7.14	7.14	0	0.00%

Compiled by Jane Campbell with data provided by Forecast International of Newtown, Conn.

**Bold** indicates highest number in each category.

\*The Gulfstream rating category changed this year, and therefore a direct comparison cannot be made between this year's and last year's ratings.



## How the Survey Was Administered

Continued weakness in the business aviation market appears to be reflected in a low response rate to the 2010 AIN Product Support Survey. This year's survey invited 17,284 AIN readers to participate but only 921 completed the survey, for a return rate of 5.3 percent. Previous participation levels were 12 percent in 2009, 10.28 for 2008 and 10 percent in 2007. According to Forecast International of Newtown, Conn., which helped design and administer the survey with AIN, "While this response is a valid basis for determining subscriber opinion, the decrease in participation is discouraging and appears to be a cumulative, strong result of the poor condition of the business aviation community over the past few years."

The AIN Product Support Survey is conducted entirely on the Internet, although some participants are invited via postcard. AIN did not, however, have e-mail addresses for all invited participants, so the return rate for those with e-mail addresses (11,050) is higher, at 8.3 percent.

It should be noted that AIN has asked airframe manufacturers to provide customer lists so that some models that don't typically receive high enough response rates to be included might qualify for inclusion. This also will help with new models entering service, such as Embraer's new Phenom 100 and 300, and with out-of-production

aircraft. In all of these cases, the manufacturer, if electing to participate, is required to provide a complete list of those customers, and AIN invites those customers who qualify to become subscribers. Not all of those lists include e-mail addresses, which explains the difference between the 8.3 percent participation rate for participants with e-mail addresses and the 5.3 percent rate for the total number of invited participants. Last year, for example, 14,948 people were invited to complete the survey, while this year that number jumped to 17,284, swelled by lists provided by manufacturers.

This year's survey was accessible from April 23 to June 13, with time added to encourage additional participation. One change that might have made a difference this year is that respondents were initially required to provide registration numbers of the aircraft they operate. AIN changed this requirement during the survey and made providing registration numbers voluntary on May 20, but this might still have discouraged participation. This year, AIN also added questions about where the aircraft is serviced and the type of service facility.

The survey asks AIN readers to rate their aircraft, engines and avionics in 10 categories. On the one-to-10 rating scale, one is inadequate and 10 is excellent. To be listed in the results, a

manufacturer had to garner at least 20 ratings.

The following are the 10 ratings categories, including explanations of the key points that survey participants were asked to consider when submitting their opinions.

- **Factory 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**—ease of use, formats available, timeliness of updating.
- **Technical Reps**—response time, knowledge, effectiveness.
- **Maintenance Tracking Programs**—cost, ease of use, accuracy, reliability.
- **Overall Product Reliability**—how the product's overall reliability and quality stack up against the competition's.

The aircraft results are published in this issue, while the avionics report will be featured next month and engines in October. —M.T.

## 2010 RATINGS

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

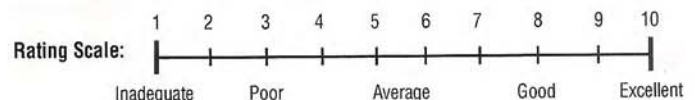
	Overall Average 2010	Overall Average 2009	Rating Change from '09 to '10	% Change	Factory Service Centers	Auth. Service Centers	Parts Availability	Cost of Parts	AOG Response	Warranty Fulfillment	Technical Manuals	Technical Reps	Mx Tracking Programs	Overall Aircraft Reliability
<b>NEWER BUSINESS JETS</b> ↑														
Gulfstream (G1V through G550)	<b>8.31</b>	N/app.	N/app.	N/app.	7.96	8.24	<b>8.44</b>	6.35	<b>8.58</b>	<b>8.55</b>	<b>8.24</b>	<b>8.74</b>	<b>8.71</b>	<b>9.08</b>
Cessna (Citation)	8.22	7.81	0.41	5.24%	7.78	8.28	8.33	<b>6.93</b>	8.43	8.40	8.04	8.56	8.41	8.79
Bombardier (Learjet)	7.95	7.39	0.56	7.61%	7.69	7.78	7.90	6.51	8.13	8.41	7.91	8.82	8.00	8.38
Gulfstream (G100 to G200)	7.75	N/app.	N/app.	N/app.	7.70	7.54	7.32	6.60	7.81	8.07	7.84	8.26	7.80	8.38
Dassault (Falcon)	7.68	7.52	0.16	2.18%	7.55	6.94	7.71	6.27	8.07	8.07	7.56	7.97	8.03	8.47
Hawker Beechcraft (Hawker except 400XP)	7.66	7.29	0.37	5.11%	7.84	7.90	7.07	6.23	7.28	8.27	7.31	8.24	8.25	8.26
Bombardier (Challenger)	7.63	7.56	0.07	0.94%	7.65	7.48	7.24	6.08	7.72	7.87	7.66	8.29	7.90	8.30
Hawker Beechcraft (Premier I, Hawker 400XP)	7.41	7.40	0.01	0.09%	8.11	8.29	7.13	5.52	7.18	7.27	7.62	7.59	7.76	7.92
Bombardier (Global Express/XRS, Global 5000)	7.16	6.73	0.43	6.38%	7.40	7.16	6.77	5.63	7.18	7.39	6.88	8.20	7.44	7.52
<b>OLDER BUSINESS JETS</b> ↑↑														
Gulfstream (GII through GIV)	<b>8.14</b>	N/app.	0.38	5.28%	<b>7.96</b>	<b>7.76</b>	<b>8.35</b>	<b>6.14</b>	<b>8.65</b>	<b>8.27</b>	<b>8.23</b>	<b>8.61</b>	<b>8.61</b>	<b>8.76</b>
Dassault (Falcon)	7.59	7.21	0.38	5.28%	7.91	6.97	7.73	5.61	7.92	7.35	7.33	8.11	7.91	8.84
Cessna (Citation)	7.46	7.39	0.07	0.97%	7.58	7.08	7.70	5.86	7.53	7.22	7.70	7.58	7.79	8.32
Bombardier (Learjet)	7.35	7.11	0.24	3.33%	7.32	6.58	7.34	6.00	7.67	7.04	7.64	7.74	7.92	8.01
Hawker Beechcraft (Hawker)	7.18	7.03	0.15	2.08%	7.33	6.89	6.92	5.62	6.98	6.87	7.27	7.93	7.95	8.06
Bombardier (Challenger)	7.06	6.66	0.40	6.00%	7.79	6.86	6.71	5.29	7.03	6.76	7.16	7.45	7.74	7.93
Hawker Beechcraft (Premier I, Diamond, Beechjet 400A)	6.94	6.74	0.20	2.92%	7.25	7.25	6.95	5.58	7.06	7.00	6.26	6.77	7.33	8.05
<b>NEWER TURBOPROPS</b> ↑														
Hawker Beechcraft (King Air)	<b>7.61</b>	<b>7.41</b>	0.20	2.67%	7.74	6.77	7.02	6.31	7.51	7.97	7.81	7.91	7.93	8.77
<b>OLDER TURBOPROPS</b> ↑↑														
Mitsubishi (MU-2, Marquise, Diamond, Solitaire)	<b>8.90</b>	<b>8.81</b>	0.09	1.02%	<b>9.35</b>	<b>9.47</b>	<b>8.83</b>	<b>7.74</b>	<b>8.82</b>	<b>9.00</b>	<b>8.78</b>	<b>8.87</b>	<b>8.81</b>	<b>9.57</b>
Hawker Beechcraft (King Air)	6.82	7.06	-0.24	-3.41%	7.35	6.45	6.85	5.65	6.48	6.59	7.04	6.66	6.79	8.07
<b>ROTORCRAFT (All Ages)</b>														
Bell	<b>7.91</b>	<b>6.97</b>	0.94	13.54%	8.29	7.93	7.68	6.32	7.87	8.06	8.13	8.48	8.29	8.46
AgustaWestland	7.48	6.85	0.63	9.18%	8.52	8.13	6.54	6.13	6.79	7.70	8.29	8.25	5.90	8.00
Sikorsky	7.09	6.88	0.21	3.08%	7.10	6.95	6.58	5.92	6.88	7.32	7.54	7.74	7.24	7.68
Eurocopter	6.17	6.50	-0.33	-5.06%	6.18	5.53	5.26	4.76	6.00	6.18	6.68	7.33	6.00	7.51

Compiled by Jane Campbell with data provided by Forecast International of Newtown, Conn.

\* Last year's ratings for Gulfstream are not included due to changes made to more accurately reflect Gulfstream's model breakdown.

Bold indicates highest number in each category.

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



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