



What's Your Business Aircraft Worth Today?

Points of Value specific to used Bombardier Globals and Challenger Jets 'For Sale'

Senior Certified Aircraft Appraiser Jeremy Cox continues his new series spotlighting aircraft makes and models and their value points. This month, the focus is on used Bombardier Global and Challenger jets.

Reviewing the value of used Bombardier business jets begins by considering the specifics of certain models. For example, at the top end of the Bombardier product line is the Large Cabin & Ultra Long Range Global 6000, which is currently projected by Aircraft Bluebook to accumulate 500 flight hours annually.

The current used Global 6000 market shows there are eight aircraft (from a fleet of 228) 'For Sale', offering an average TTAF of 952 hours and an average of 341 landing cycles. That's an average

ratio of just over two flight-hours, 47 minutes per landing. The average Year of Manufacture of the Global 6000 'For Sale' is 2013.

Meanwhile, the Large Cabin Bombardier Challenger 605 is projected by Aircraft Bluebook to accumulate 490 flight hours annually. Currently there are 25 Challenger 605s from a fleet of 288 'For Sale'.

These show an Average TTAF of 2,486 and have an average 712 landing cycles, giving it an average ratio of approximately three hours, 29 minutes flight time per landing. The average Year of Manufacture



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of the 'For Sale' Challenger 605 is 2009 (eight years old.)

In the Super-Mid-Size category is the Bombardier Challenger 300 which Aircraft Bluebook projects to accumulate 490 flight hours annually. Currently there are 39 aircraft 'For Sale' from a fleet of 453.

The current Challenger 300 'For Sale' average shows a TTAf of 2,841 hours, versus an average of 1,521 hours landing cycles, giving an average ratio of approximately one flight-hour, 52 minutes per landing. The average Year of Manufacture of the 'For Sale' aircraft is 2007 (10 years old).

Using an older example of used Bombardier jets 'For Sale', the Challenger 601-3A/3R is projected by the Aircraft Bluebook to accumulate 425 flight hours annually.

The current 601-3A/3R Market shows 30 aircraft 'For Sale' from a fleet of 190, with an average TTAf of 7,780 hours. That's in comparison to 4,169 landing cycles, which gives an average ratio of just over one flight-hour, 52 minutes per landing. The average Year of Manufacture of the 'For Sale' aircraft is 1991 (26 years old).

Avionics Issues Faced by Bombardier Models Today

Buyers and sellers of Bombardier Challenger aircraft need to be aware that FANS 1/1A, and ADS-B still pose issues for some of the older models. For some, it is just not economically feasible to accomplish the necessary upgrade, and asking/selling prices are reflecting this fact.

The same value conundrum can also arise out of the 10-year landing gear overhaul coming due on some models.

Obsolescence, and lack of support for CRT EFIS avionics systems also requires costly (\$750k to \$1m) Liquid Crystal Display retrofits, especially in the Global Express series.

Residual Values of Used Challengers & Globals

Since January of 2010 to Present, there have been 39 sales transactions on 29 Challenger 600 aircraft, and out of these, eight have resulted in a Part-Out/Write-Off of the subject aircraft.

The value of a 1983 model Challenger 600 is



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currently about 9% of its List Price in 1983 (\$9m), with a retail value today of \$800,000. Mechanical cockpit Challenger 601-1A models are often sold at below \$800k. The Challenger 600 will sell down into the ~\$200k range.

By comparison, the residual value of a 1987 Challenger 601-3A is currently about 14% of its list price when new, and a 1996 Challenger 601-3R is currently about 15% of its list price when new.

Residual value of a 2007 Challenger 604, meanwhile, is currently about 29% of its list price when new. Today, a fully FANS 1/1A-compliant Challenger 604 will sell in the high \$3m range, and might even break \$6.5m. Values for the Challenger 605 can range from \$8,500,000 to >\$13,000,000 in today's market.

Into the Super-Mid-size category of Challenger jets, the residual value of a 2003 Challenger 300 is currently at about 35% of its new price, but depending on age and condition, this model's value will range from \$5,700,000 up to >\$12,000,000.

Looking at the Global family, the residual value of a 2004 Global Express currently stands at about 31% of its new value. The first Global Express aircraft are now 18 years old, and for some the selling prices are below \$7m, which equates to a residual value of only 18% (the 1999 new price was \$38.02m).

Values for used Global 5000s range from \$13-30m, depending on year of manufacture/delivery, whereas the Global 6000 normally trades anywhere between \$27-41m, even though the available year-models only vary by 2-3 years.



Specific Upgrades/Modifications

Following is a list of Appraised Value Add-Ons for each Bombardier model (note: these are my numbers, not the numbers from the value guides)...

- Challenger 601-1A/3A Extended Range Tank (ER) - \$200,000
- Challenger 604 No Auto-Throttle (\$250,000 Deduction); FANS 1/1A - \$190,000; Heads-Up Display - \$300,000.
- Challenger 605 Heads-Up Display - \$300,000
- Challenger 300 Proline 21 Advanced (Block Upgrade) \$350,000; Dual IFIS \$150,000
- Global Express Heads-Up Display - \$300,000; Batch 3 Avionics - \$450,000; Primus Elite 875 LCD EFIS upgrade - \$650,000. ■

Respective Bombardier model manufacture and fleet numbers

Jeremy Cox is experienced in presenting his expertise at aviation meetings, seminars and conferences. If you have an upcoming event and would like to discuss having Jeremy present, you can contact him via jcox@jetbrokers.com

• Challenger 600:	1980-1983;	85 total built (70 currently active)
• Challenger 601-1A:	1983-1987;	66 total built (47 currently active)
• Challenger 601-3A/3R:	1987-1996;	195 total built (190 currently active)
• Challenger 601-SE:	1993-2004;	14 total built (8 currently active)
• Challenger 604:	1996-2007;	365 total built (360 currently active)
• Challenger 605:	2006-2015;	288 total built (288 currently active)
• Challenger 650:	2014-Present;	38 total built (38 currently active)
• Challenger 300:	2003-2014;	456 total built (453 currently active)
• Challenger 350:	2013-Present;	169 total built (167 currently active)
• Global Express:	1996-2004;	148 total built (145 currently active)
• Global Express XRS:	2005-2012;	168 total built (165 currently active)
• Global 5000:	2005- Present;	217 total built (210 currently active)
• Global 6000:	2010-Present;	257 total built (228 currently active)
• Global 7000:	In-Certification	

Total Active Bombardier Challenger/Global Fleet = 2,369 Aircraft