

AircraftBluebook⁷

MARKETLINE

VOL 29 NO 1

2016 NEWSLETTER

PRE-OWNED INVENTORIES GROW A BUYER'S MARKET

By Carl Janssens, ASA  | Chief Appraiser | Aviation Week Network

It appears the first quarter of 2016 is demonstrating what pace the pre-owned aircraft market is likely to follow going forward this year. New deliveries of business aircraft seem to have created a greater inventory of available pre-owned aircraft in the marketplace. Trading is still consistent with levels of activity experienced in the fourth quarter of 2015. What appears to be lacking is an increase in buyers that would have otherwise offset the growth in inventories of business aircraft currently being offered for sale or lease.

The jet category in Aircraft Bluebook continues to harbor the most vulnerability in the area of value retention. Fifty-two percent of the jet category reported in Aircraft Bluebook continues to demonstrate a decline in prices. A couple of exceptions include the Cessna Citation XLS+ and Beech Premier 1A, which were reported with modest price increases when compared to the winter edition of Aircraft Bluebook. A follow-up with regard to market saturation within the jet category in Aircraft Bluebook is further discussed in the accompanying article by Dennis Rousseau from AircraftPost.

The turboprop market also demonstrated some signs of cooling down when compared to previous quarters reported in the Aircraft Bluebook. Formerly resting in a stable price environment, based on published pricing in the previous winter release of Aircraft Bluebook, turboprop values are now in the decline. Thirty percent of this market segment reported a decrease in values in Aircraft Bluebook. The Twin Commander 1000 was the exception with reported increases of \$100,000 in value when compared to the previous quarter. Cessna, Beech, Quest and Socata experienced declines in pricing.

The piston twin category experienced little change when compared to values posted in the previous edition of Aircraft Bluebook. Most of this market remained consistent with 619 model variants remaining unchanged out of a total of 693 models. A point of observation in the multipiston market segment: Limited production impacts value retention.

A mirror to the piston twin is the single-piston aircraft segment reported in Aircraft Bluebook. Although the single-piston category is the largest by number of models represented in Aircraft Bluebook, only 178 of 2719 models experienced

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BLUEBOOK-ATA-GLANCE

JET

INCREASED	13
DECREASED	563
STABLE	511

TURBOPROP

INCREASED	4
DECREASED	196
STABLE	464

MULTI

INCREASED	1
DECREASED	73
STABLE	619

SINGLE

INCREASED	22
DECREASED	178
STABLE	2519

HELICOPTER

INCREASED	1
DECREASED	152
STABLE	1080

Continued on page 3

VALUE RETENTION – IN A DOWN MARKET

By Dennis Rousseau | President and Founder | AircraftPost.com

With the purchase of a new aircraft, there are a couple underlying assumptions: (a) with a new delivery, an accompanying new aircraft warranty will cover extraordinary events (time and materials) for the first three to five years; and (b) the new aircraft should retain value with average utilization and equipment commensurate with a 30-year life cycle.

A number of events have transpired over the last few years to rattle the confidence of the buyer and disrupt a 'normal' value curve. Focusing on medium and long range business jets, first and foremost, the business aircraft industry has not experienced the sheer number of aircraft manufactured since 2008. This

equates to a 55 percent increase in inventories. Secondly, a normal market would typically consider 5-10 percent of the available fleet being offered as acceptable. However, with the increase in aircraft production coupled with zero growth in the global economic markets, a revised percentage of the available fleet on the market has ballooned to slightly over 19 percent in 2015 from 10 percent in 2008. From a unit perspective, total aircraft on the market in 2008 were 530 and in 2015 there were 1600, a 300 percent increase! Meanwhile the percentage of aircraft on the market that actually sold remained essentially flat from 2008 to 2015 at 34 percent. This supply and demand imbalance creates the perfect storm for market saturation.

	2008	2009	2010	2011	2012	2013	2014	2015
*Overall In-Service	5317	5816	6224	6612	7039	7478	7894	8233
Overall on Market	530	758	794	785	1043	1240	1408	1600
Total % on Market	10.0%	13.0%	12.8%	11.9%	14.8%	16.6%	17.8%	19.4%
Overall Withdrawn	12	85	97	57	56	104	165	233
Overall Sold	181	250	306	294	403	496	552	557
Total % Sold	3.4%	4.3%	4.9%	4.4%	5.7%	6.6%	7.0%	6.8%
% On market that sold	34.2%	33.0%	38.5%	37.5%	38.6%	40.0%	39.2%	34.8%

*Medium and long-range business jets

The total number of aircraft in-service coupled with the percentage of the fleet available for sale has a direct impact on value retention. Consider an aircraft that sold new in 2007 has retained only 50 percent of its original cost just eight years later, or in a couple cases a mere 30 percent of its original

cost. Traditionally at 8-10 years the **aggregate** would expect a current generation aircraft to retain at least 70 percent of its original cost. However it seems, based on the numbers, these markets have experienced accelerated depreciation exacerbating any hopes of near term recovery.

	2007	2008	2009	2015
	Price New	Avg Sale Price % Retention	Avg Sale Price % Retention	Avg Sale Price % Retention
Hawker 850XP	\$13,800,000	**	\$8,600,000 62%	\$4,800,000 35%
Lear 60XR	\$13,200,000	**	\$8,500,000 64%	\$4,000,000 30%
Citation Sovereign	\$16,100,000	**	\$12,800,000 80%	\$8,000,000 50%
Challenger 300	\$17,900,000	\$22,000,000 123%	\$16,400,000 92%	\$10,300,000 58%
Challenger 605	\$27,400,000	**	\$18,000,000 66%	\$12,500,000 46%
Global XRS	\$45,500,000	\$55,000,000 121%	\$40,300,000 89%	\$26,100,000 57%
Falcon 2000EXy	\$26,300,000	\$31,500,000 120%	\$21,800,000 83%	\$14,700,000 56%
Falcon 900EXy	\$35,100,000	\$43,000,000 123%	\$29,800,000 85%	\$21,900,000 62%
Gulfstream G450	\$34,800,000	\$43,000,000 124%	\$26,500,000 76%	\$20,300,000 58%
Falcon 7X	\$42,300,000	**	**	\$23,200,000 55%
Gulfstream G550	\$45,800,000	\$58,000,000 127%	\$38,300,000 84%	\$29,000,000 63%

With little to no global economic growth, a burgeoning pre-owned inventory, dwindling demand and a slow start to 2016,

it seems there would appear further deterioration in value retention arenas or outright stagnation.

a decline in value when compared to the previous quarter. A sizeable portion of the piston singles are legacy aircraft, those aircraft that are in excess of 20 years in age. At the same time, a piston single's value could range from a mere \$14,000, as in a 1946 Aircoupe, to a new Piper Mirage with a price tag of well over \$1 million. Also, there are more potential buyers in this range that can afford pilot-owned and operated aircraft.

The helicopter segment reported in Aircraft Bluebook is the second largest category of models with a total of 1233 models currently reported within Bluebook. The helicopter market has suffered largely from the decline in the price of crude oil. In many ways, little or no activity has nearly paralyzed this market, which is approaching the uncertainty the business jet market experienced in the economic collapse of 2008. Unlike 2008, though, the broader economy is healthy. Values in the helicopter market appear stable because helicopter trading is light at the moment. Once crude oil prices rebound and more helicopter sales occur, real values will become more apparent with the increased sales volume.

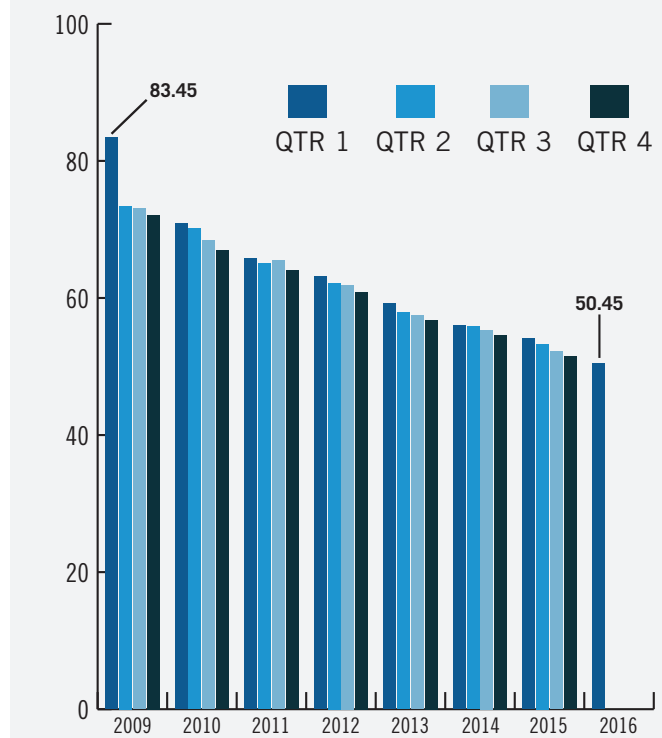
CURRENT MARKET STRENGTH

CMS represents an aircraft's current strength in the market. An A+ rating indicates the aircraft is enjoying a very firm market. Prices for an A+ aircraft are steadily rising, and holding times are very short or nonexistent. At the opposite end of the spectrum, a C- aircraft is one experiencing a very soft market. Its price is commonly discounted, and it often sets on the ramp in excess of eight months before selling. It is important to remember that Current Market Strength is not a forecast. It is valid only at Marketline's effective date of release. *See chart below.*

MARKETLINE CHARTS

All of the listed aircraft have a composite score that is presented in the Used Aircraft Market graph. Data points are represented in relationship to the respective new delivered historical price that is equal to 100%. The measure of change is reported in the actual percentage of value in relation to new. The delta between reporting periods can be concluded as the percentage of change.

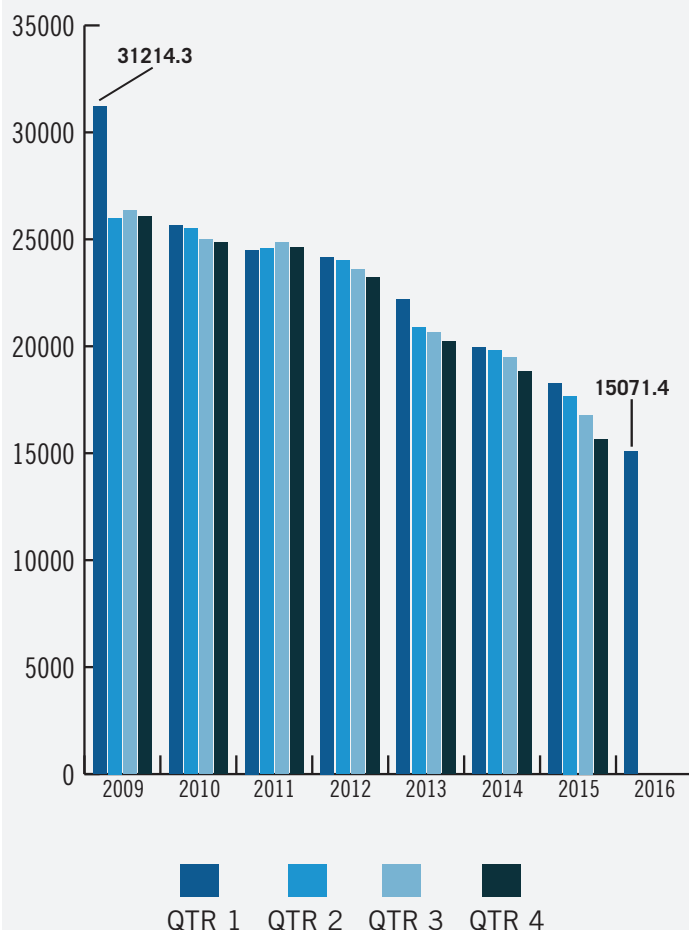
USED AIRCRAFT MARKET



CURRENT MARKET STRENGTH (CMS)

2007/2008 Model	CMS	2007/2008 Model	CMS	2007/2008 Model	CMS
Beech Premier 1A	B-	Gulfstream G-200	B	Cirrus SR22-G2	A-
Bombardier Global XRS	A	Gulfstream G150	B	Cirrus SR20-G2	B-
Bombardier Challenger 604	B	Hawker 800XP	B	Diamond DA40-180XLS Star	B
Bombardier Challenger 300	A	Hawker 400XP	C	Diamond DA20-C1 Eclipse	B-
Bombardier LearJet 60XR	B-	Beech King Air 350	A	Mooney M20TN Acclaim	B
Bombardier LearJet	A-	Beech King Air B200	A	Mooney M20R Ovation	B-
Cessna Citation X	B+	Beech King Air C90GT	A	Piper PA46-350P Mirage	B
Cessna Citation XLS	B+	Cessna 208B Grand Caravan	A	Piper PA34-220T Seneca V	B
Cessna Citation CJ3	A	Piaggio P180	B	Piper PA28R-201 Arrow	B
Cessna Citation CJ2	A	Pilatus PC-12/47	B	Piper PA28-181 Archer III	B
Dassault Falcon 900	A	Piper PA46-500TP Meridian	B+	Evektor Sportstar (LSA)	C+
Dassault Falcon 50EX	B-	Socata TBM850	B	Flight Design CTLS (LSA)	B-
Dassault Falcon 2000EX	A	Beech 58 Baron	B-	Agusta A109 Grand	B+
Embraer EMB-135 Legacy	A-	Beech A36 Bonanza	A-	Bell 206 L-4	A-
Embraer Phenom 100	A	Cessna T206H Stationair	B+	Eurocopter AS350-B3	B
Gulfstream G550	A	Cessna 182T Skylane	A-	Robinson R44 Raven II	A
Gulfstream G450	A	Cessna 172S Skyhawk	A-	Sikorsky S-76C++	B+

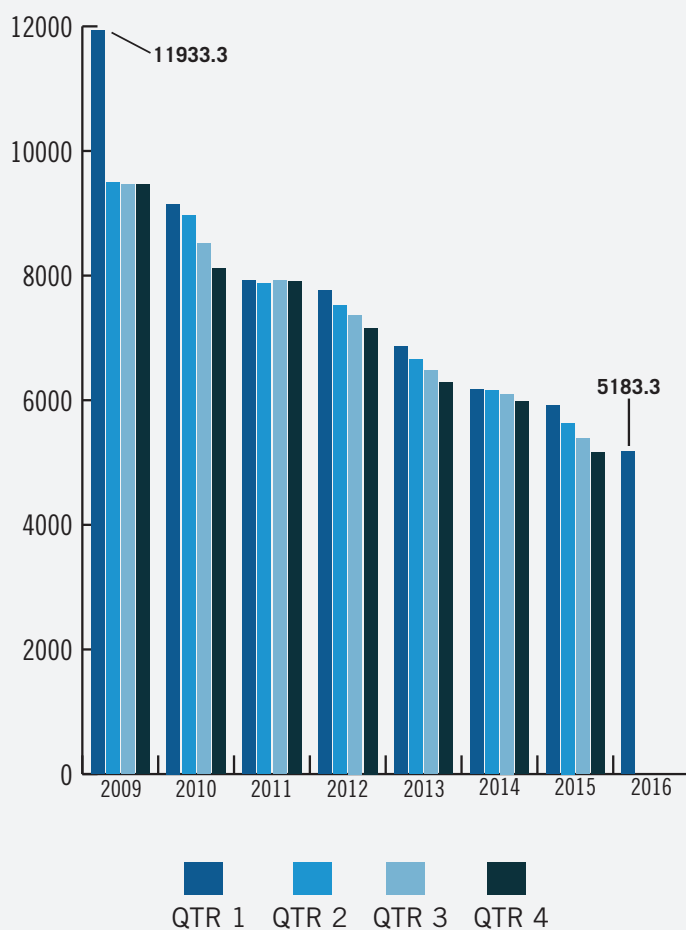
LARGE JET



The Large Jet chart depicts the average price (in thousands) of the seven jets listed. Each model's year will precede the name of the aircraft.

YEAR/MODEL	%CHANGE
2006 Bombardier Global Express	-6.7
2007 Bombardier Challenger 605	-4.5
2005 Dassault Falcon 900 EX Easy	-5.6
2005 Dassault Falcon 200EX Easy	0.0
2005 Gulfstream G550	0.0
2005 Gulfstream G450	-3.4
2005 Embraer EMB135 Legacy	-6.7

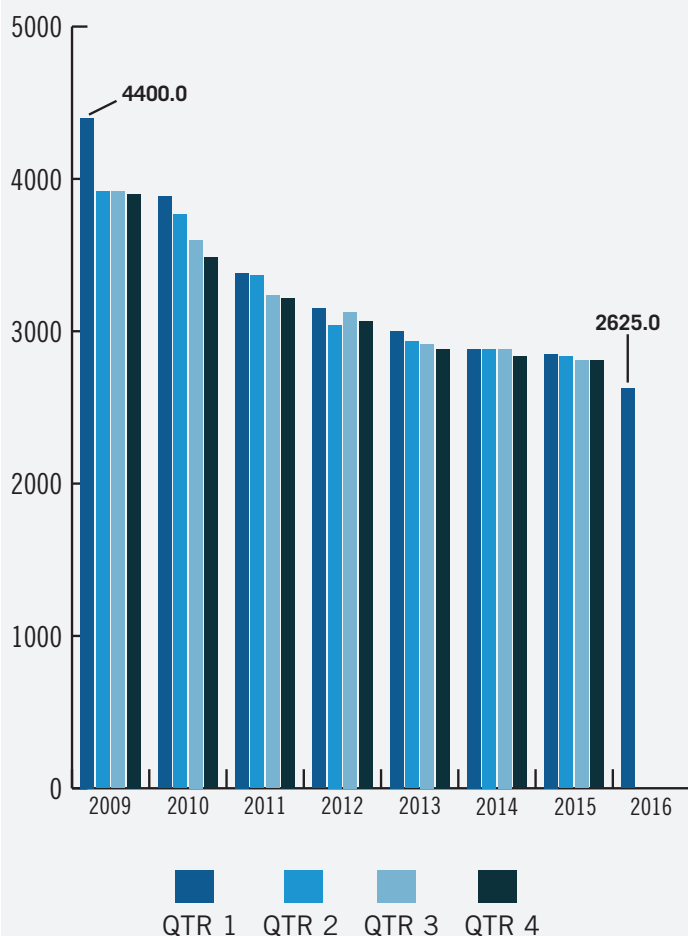
MEDIUM JET



The Medium Jet chart depicts the average price (in thousands) of the six jets listed. Each model's year will precede the name of the aircraft.

YEAR/MODEL	%CHANGE
2005 Bombardier Challenger 300	0.0
2005 Bombardier Lear 45XR	0.0
2005 Cessna Citation Sovereign	0.0
2005 Cessna Citation XLS	7.7
2006 Gulfstream G150	0.0
2005 Hawker 800XP	-5.9

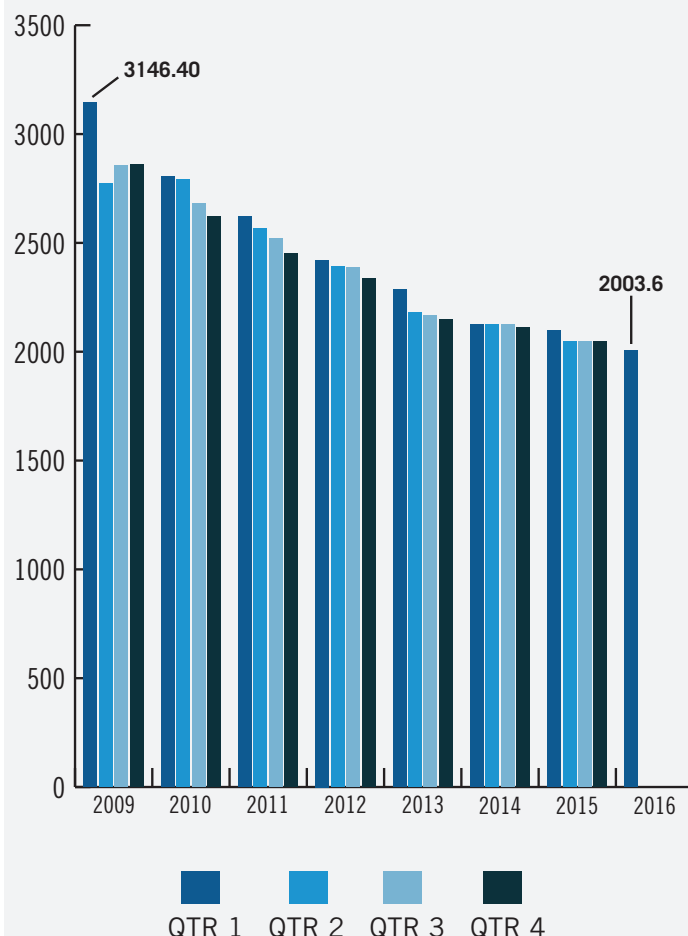
SMALL JET



The Small Jet chart depicts the average price (in thousands) of the six jets listed. Each model's year will precede the name of the aircraft.

YEAR/MODEL	%CHANGE
2005 Beech Premier 1	0.0
2005 Cessna Citation CJ2+	0.0
2006 Cessna 510 Mustang	0.0
2008 Embraer Phenom 100	-4.5
2009 Embraer Phenom 300	-13.4
2005 Hawker 400XP	-6.1

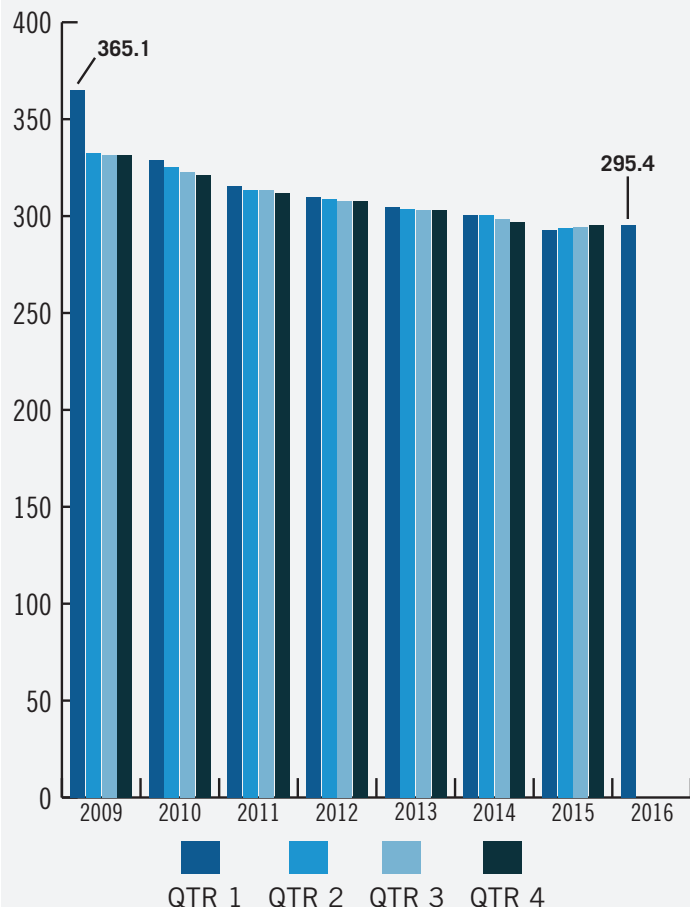
TURBOPROP



The Turboprop chart depicts the average price (in thousands) of the seven turboprops listed. Each model's year will precede the name of the aircraft.

YEAR/MODEL	%CHANGE
2005 Beech King Air350	0.0
2005 Beech King AirB200	-2.0
2005 Beech King AirC-90B	-3.2
2005 Cessna 208 Grand Caravan	0.0
2005 Piaggio AvantiP180	0.0
2005 Pilatus PC12/45	0.0
2005 Socata TBM700C2	-12.3

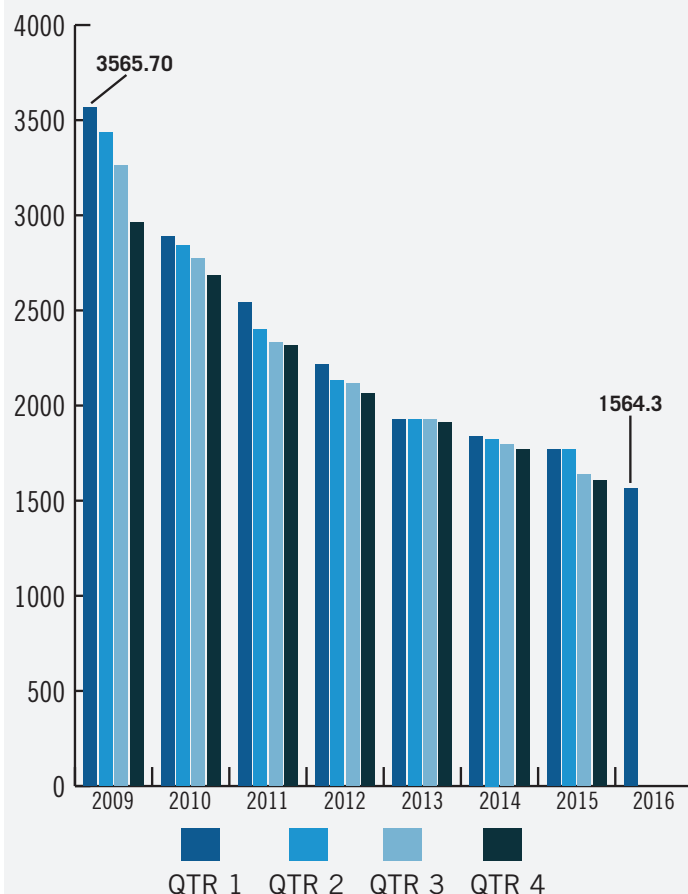
SINGLE/MULTI PISTON



The Single/Multi-Piston chart depicts the average price (in thousands) of the 12 aircraft listed. Each model's year will precede the name of the aircraft.

YEAR/MODEL	%CHANGE
2005 Beech 58 Baron	0.0
2005 Diamond DA42 Twin Star	0.0
2005 Piper PA34-220T Seneca V	0.0
2005 Beech A36 Bonanza	0.0
2005 Cessna/Columbia 400	-1.9
2005 Cessna 182T Skylane	2.7
2005 Cessna T206H Turbo Stationair	0.0
2005 Cessna 172S Skyhawk SP	-3.4
2005 Cirrus SR22-G2	0.0
2005 Diamond DA40-180 Star	0.0
2005 Piper PA46-350P Mirage	0.0
2005 Piper PA28R-201 Arrow	3.1

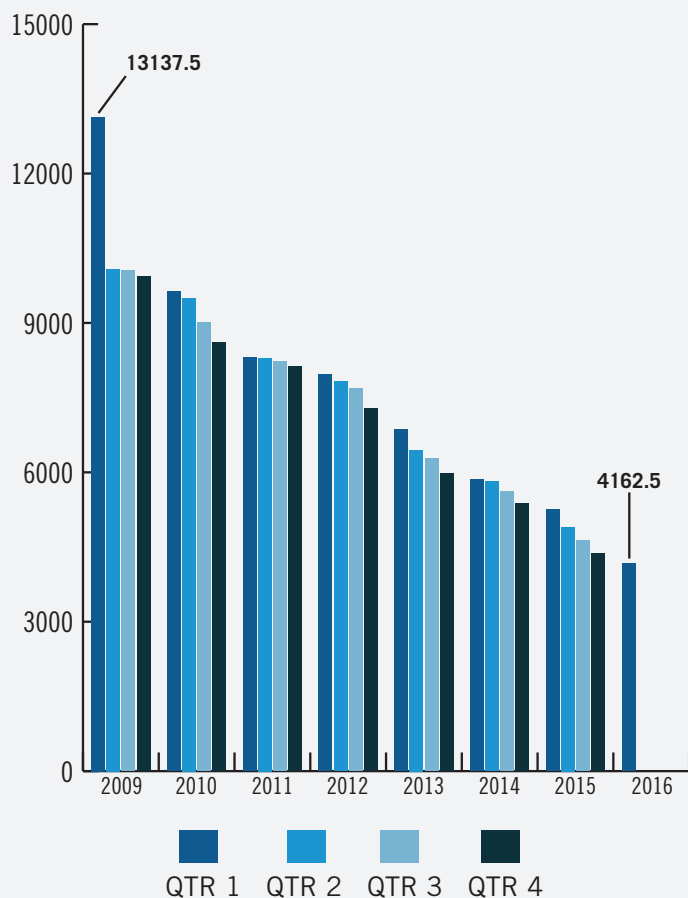
HELICOPTER



The Helicopter chart depicts the average price (in thousands) of the seven helicopters listed. Each model's year will precede the name of the aircraft.

YEAR/MODEL	%CHANGE
2005 Agusta A109E Power	0.0
2005 Bell 430	0.0
2005 Eurocopter EC130B4	0.0
2005 Eurocopter AS350B-3 Ecureuil	0.0
2004 Enstrom 280FX	0.0
2005 Robinson R44 Raven	0.0
2005 Sikorsky S-76C+	-7.7

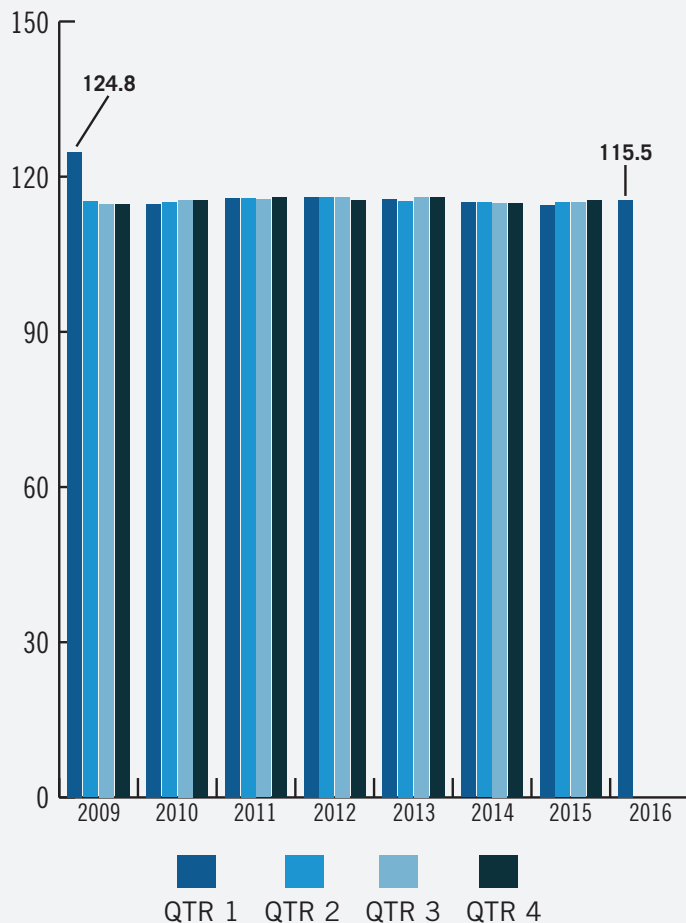
LEGACY JET



The Legacy Jet chart depicts the average price (in thousands) of the eight jets listed. Each model's year will precede the name of the aircraft. Legacy Aircraft are those produced prior to the year 2000.

YEAR/MODEL	%CHANGE
1996 Bombardier Challenger 604	0.0
1996 Bombardier Lear 31A	-5.3
1996 Cessna Citation Ultra	-14.3
1996 Dassault Falcon 900B	-4.5
1997 Dassault Falcon 50EX	0.0
1996 Gulfstream GV	-4.6
1996 Gulfstream GIVSP	-9.1
1996 Hawker800XP	-5.3

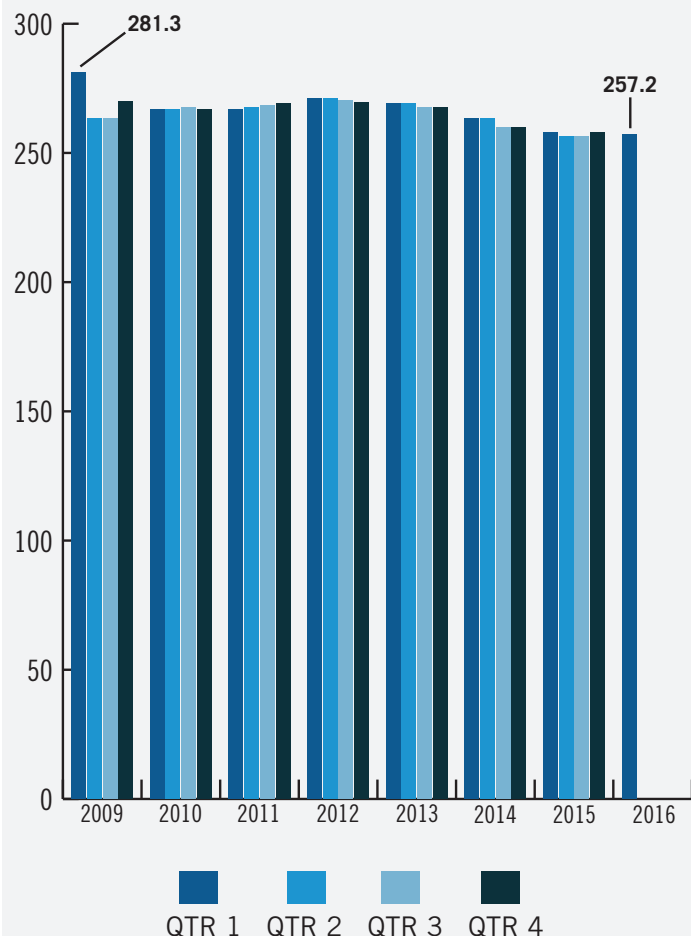
LEGACY PISTON



The Legacy Piston chart depicts the average price (in thousands) of the ten piston aircraft listed. Each model's year will precede the name of the aircraft. Legacy Aircraft are those produced prior to the year 2000.

YEAR/MODEL	%CHANGE
1990 Beech A36 Bonanza	0.0
1990 Beech F33 Bonanza	0.0
1986 Cessna 210 Centurion II	0.0
1986 Cessna 172P Skyhawk B	0.0
1985 Cessna 152 Commuter II	0.0
1990 Mooney 252 TSE	0.0
1990 Piper PA-28-236 Dakota	0.0
1990 Piper PA-28R-201 Arrow	0.0
1990 Piper PA-28-181 Archer II	0.0
1990 Piper PA-28-161 Warrior II	0.0

LEGACY MULTI ENGINE PISTON

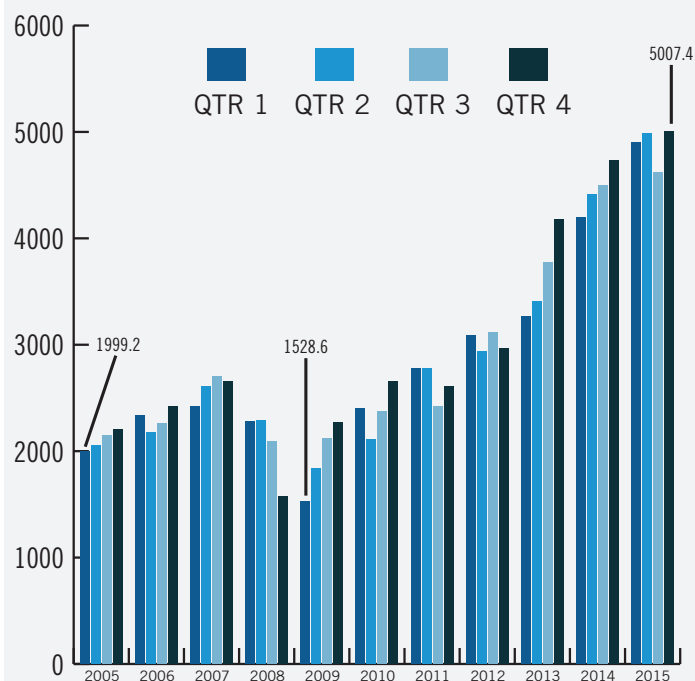


The Legacy Multi Engine Piston chart depicts the average price (in thousands) of the six aircraft listed. Each model's year will precede the name of the aircraft. Legacy Aircraft are those produced prior to the year 2000.

YEAR/MODEL	%CHANGE
1986 Beech 58P Pressurized Baron	0.0
1990 Beech 58 Baron	0.0
1985 Cessna 421 Eagle III	-1.2
1981 Cessna 310R II	0.0
1982 Piper PA-310C Navajo	0.0
1990 Piper PA-34-220T Seneca III	0.0

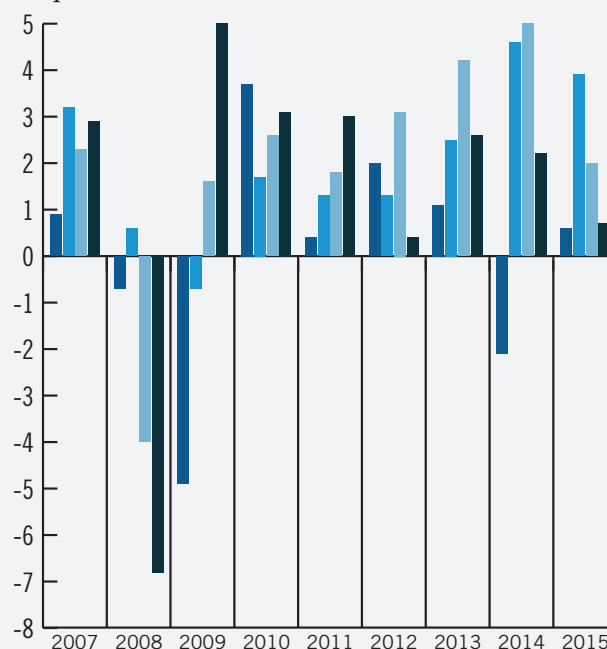
NASDAQ

Consider these graphs as crosschecks. The general aviation and business aircraft market does not operate in a vacuum but is a part of the bigger picture.



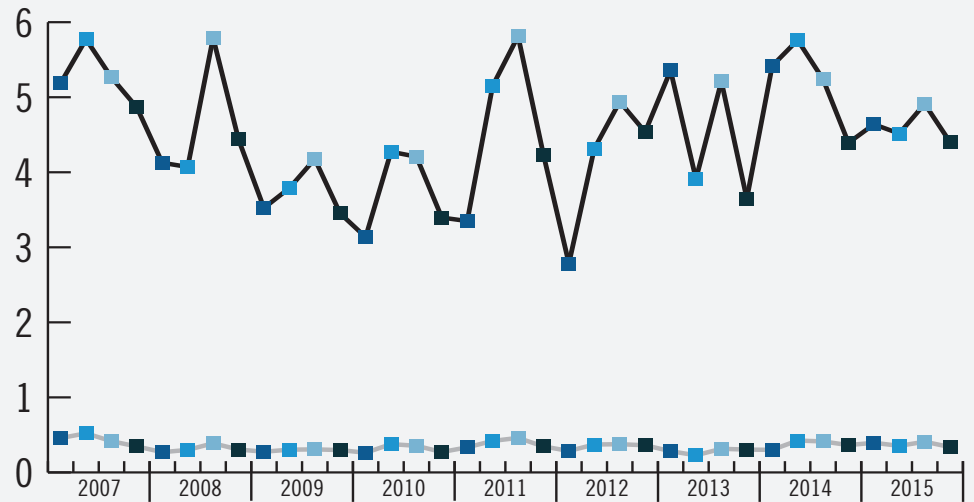
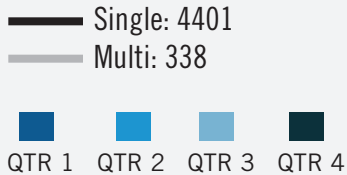
U.S. REAL GDP

Each data point represents the BEA's final figure or latest estimate of the quarter-to-quarter seasonally adjusted annual rates of change in real GDP "based on chained 2005 dollars." The study begins with the first quarter in 2006.



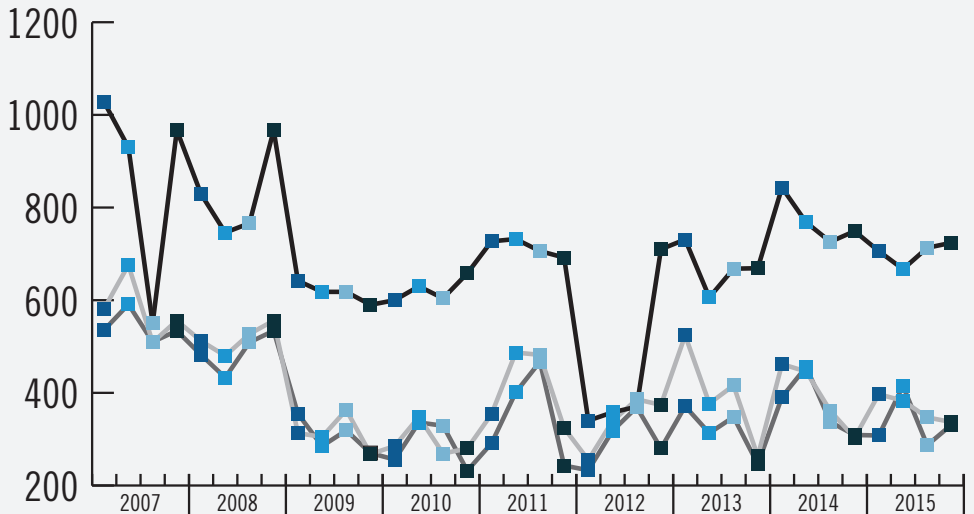
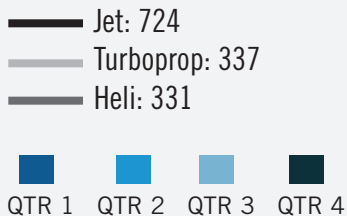
CHANGE OF STATUS: SINGLE/MULTI

The black line in the chart depicts change-of-status data for singles. The light gray line represents multi.



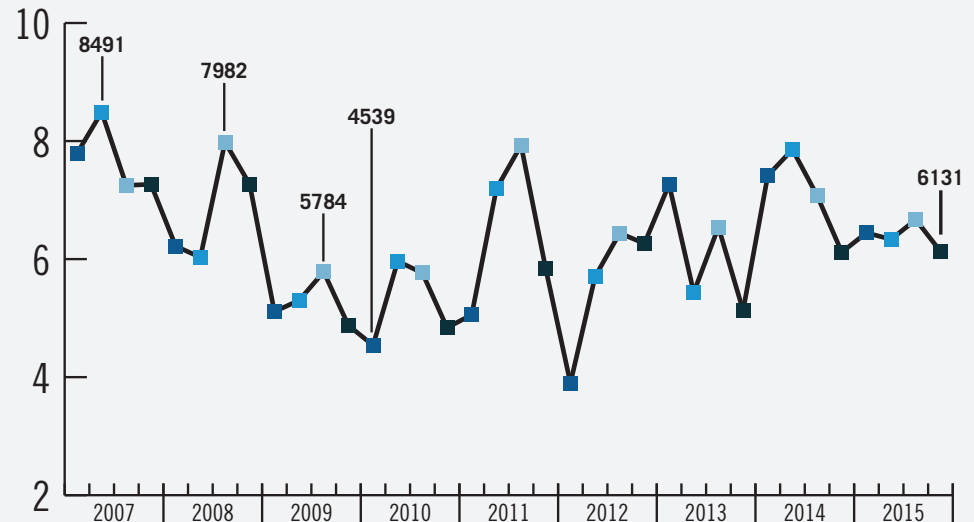
CHANGE OF STATUS: JET/TURBO/HELI

The black line in the chart represents change-of-status information for jets. The light gray line depicts turboprops, while the dark gray line represents helicopters.



CHANGE OF STATUS: TOTAL MARKET

Depicts change-of-status data for all aircraft included in the Aircraft Bluebook. The numbers are from the FAA Registry. Gliders, homebuilts, airliners and other aircraft not found in the Bluebook are not included in this study.



INTO THE BLUE

Aircraft Bluebook At-a-Glance

Gulfstream G-200

By Chris Reynolds, ASA | Aircraft Bluebook

Aircraft Bluebook At-a-Glance has reviewed the current market status of the Gulfstream G-200 business jet. Research for this study was obtained in part from Aircraft Bluebook, Aircraft Bluebook's Historical Value Reference, the FAA's registry website and various trade services.

Demand

Currently the G-200 fleet is approximately 245 aircraft. When this article was written, approximately 36 G-200 aircraft, representing approximately 15 percent of the fleet, were reported for sale.

Pricing

Current offerings for the G-200 range from mid-\$3 million to mid-\$8 million; airframe time varies from 1000 hours to greater than 9000 hours, depending on the year-model. Over the last year, approximately 35 sales appear to have occurred. Equipment, time/condition and

engine maintenance programs can significantly affect time on market and marketable value. In the Spring 2016 Aircraft Bluebook, a 2006 Gulfstream G-200 had a reported average retail value of \$6.8 million.

Residual Values

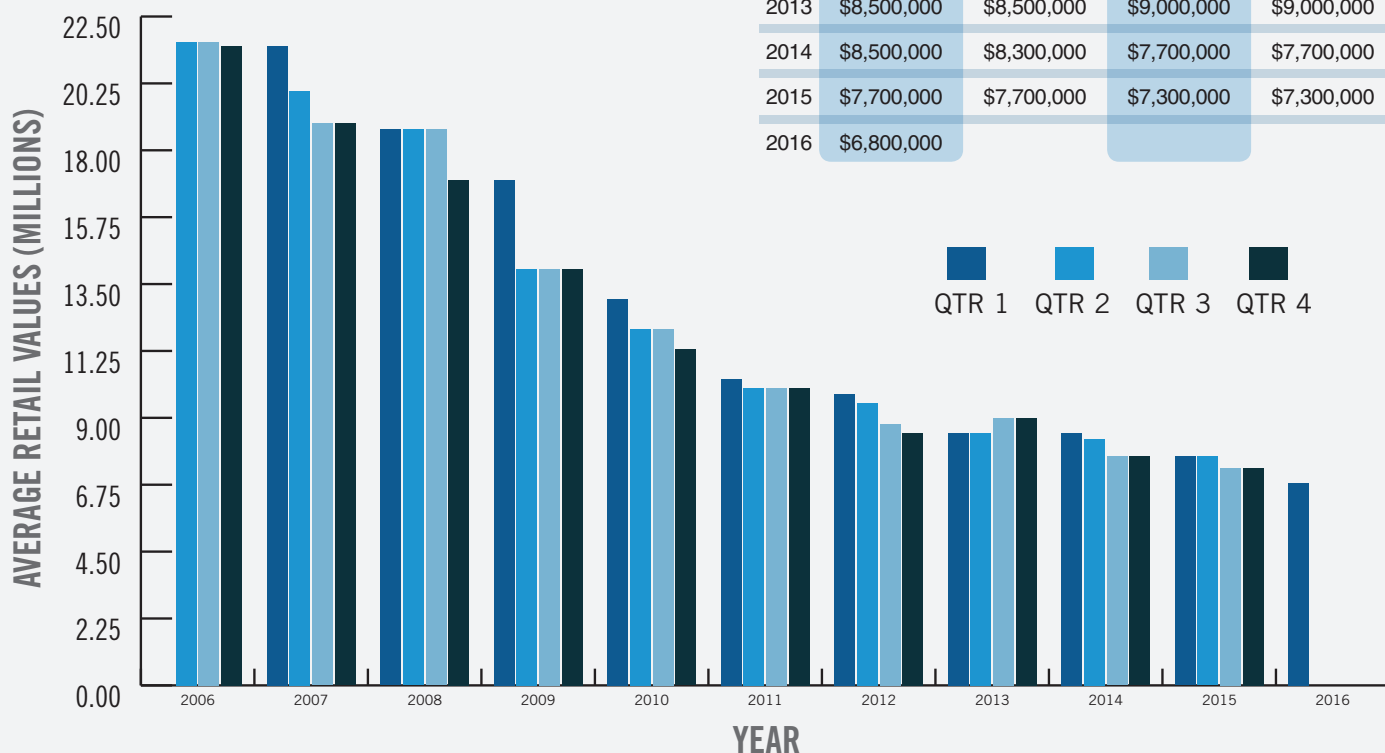
A 2006 Gulfstream G-200, whose market values have been tracked since the second quarter of 2006, was reported new with an average equipped price of \$21,646,000. Aircraft Bluebook's Historical Value Reference has demonstrated the G-200 market value performance by quarter in the graph for this 2006 model.

Other historical values can be obtained at Aircraft Bluebook's website, www.aircraftbluebook.com.

AVERAGE RETAIL VALUES

Year	Quarter 1	Quarter 2	Quarter 3	Quarter 4
2006		\$21,646,000	\$21,646,000	\$21,500,000
2007	\$21,500,000	\$20,000,000	\$18,900,000	\$18,900,000
2008	\$18,700,000	\$18,700,000	\$18,700,000	\$17,000,000
2009	\$17,000,000	\$14,000,000	\$14,000,000	\$14,000,000
2010	\$13,000,000	\$12,000,000	\$12,000,000	\$11,300,000
2011	\$10,300,000	\$10,000,000	\$10,000,000	\$10,000,000
2012	\$9,800,000	\$9,500,000	\$8,800,000	\$8,500,000
2013	\$8,500,000	\$8,500,000	\$9,000,000	\$9,000,000
2014	\$8,500,000	\$8,300,000	\$7,700,000	\$7,700,000
2015	\$7,700,000	\$7,700,000	\$7,300,000	\$7,300,000
2016	\$6,800,000			

QTR 1 QTR 2 QTR 3 QTR 4



AIRCRAFT BLUEBOOK AROUND THE GLOBE

Asian Business Aviation Conference & Exhibition (ABACE); Shanghai, China; April 12-14, 2016

ABACE is the region's largest show dedicated strictly to showcasing business aviation products and services to thousands of the region's top business leaders, entrepreneurs, wealth creators and other purchase decision-makers.

National Aircraft Resale Assoc. (NARA) Annual Meeting; Scottsdale, Ariz.; April 20-22, 2016

An exclusive organization of the world's most respected aircraft brokers/dealers and aviation products and services providers. All members of the National Aircraft Resale Association must adhere to the NARA Code of Ethics. In addition, NARA Certified Brokers/Dealers must pass a rigorous certification process. NARA is recognized by NBAA and the National Aircraft Finance Association.

National Aircraft Finance Assoc. (NAFA) Annual Conference; Ft. Lauderdale, Florida; May 11-13, 2016

The National Aircraft Finance Association is a non-profit corporation dedicated to promoting the general welfare of individuals and organizations providing aircraft financing and loans secured by aircraft; to improving the industry's service to the public; and to working with government agencies to foster a greater understanding of our members' needs.

European Business Aviation Convention & Exhibition (EBACE); Geneva, Switzerland; May 24-26, 2016

EBACE, jointly hosted each year by the European Business Aviation Association (EBAA), the leading association for business aviation in Europe, and the National Business Aviation Association (NBAA), the leading voice for the business aviation industry in the United States, is the premier annual meeting place for the European business aviation community.

Experimental Aircraft Association's (EAA) AirVenture; Oshkosh, Wisconsin; July 24-31, 2016

Beginning more than 60 years ago, EAA AirVenture has evolved from a small gathering of aircraft and aviators into a grand, week-long celebration known as "The World's Greatest Aviation Celebration." Oshkosh is filled with dazzling displays of aerobatics, informative programs, hands-on workshops, and diverse aircraft spanning all eras of flight.

National Business Aviation Assoc. (NBAA) Annual Meeting; Orlando, Florida; Nov. 1-3, 2016

Founded in 1947 and based in Washington D.C., the National Business Aviation Association (NBAA) is the leading organization for companies that rely on general aviation aircraft to help make their businesses more efficient, productive and successful.

WHAT'S NEW IN ABB

- Updated Maintenance Programs

ASK AIRCRAFT BLUEBOOK

If you have any questions about the Aircraft Bluebook, please feel free to give the editorial staff a call at 1-800-654-6776 or email us, info@aircraftbluebook.com.

WHERE CAN I REPORT MY AIRCRAFT SALES INFORMATION?

If you would like to report aircraft transactions, you can go to our website www.aircraftbluebook.com and click on the button that says "Click here to submit your aircraft sales reports" or you can email them to info@aircraftbluebook.com directly. All reports are kept confidential.

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