



# ROLLAND VINCENT ASSOCIATES

AVIATION MARKET RESEARCH AND FORECASTING

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## Pilatus PC-12: Built On A Foundation of Value

***Synopsis: In a business world where the future seems increasingly unpredictable, the Pilatus PC-12 stands out as a business aircraft that retains its resale value. With more than 1,400 aircraft in service worldwide, the PC-12 sets a high water mark with unmatched value retention in its market segment.***

Like craftsmen who rely on preferred tools to enable them to achieve their goals, owners and operators depend upon their business aircraft to be more productive, more mobile, and more connected in their professional and personal lives. Many savvy owners and operators, in concert with some of the industry's leading aircraft financiers and lessors, realize that how an aircraft performs can have as much to do with the way it holds its market value as with more traditional measures of mission capability, payload, and speed.

In the world of transportation equipment, depreciation is a fact of life, and aircraft are no exception. That said, not all aircraft are the same, and some retain their value much better than others. Aircraft that are uniquely attractive and desirable, occupying "sweet spots" in the market - whether due to design features, mission performance, quality and reliability, or other factors - typically command higher prices and valuations. Aircraft manufacturers that consistently deliver on their promises and are disciplined regarding new product development, product enhancements, production rates, and pricing will often be rewarded with high customer loyalty and repeat sales.

For those considering the purchase of a Pilatus PC-12 aircraft, we examine and assess the state of the current market, highlighting key characteristics of the Pilatus PC-12 fleet and marketplace, and specifically addressing how the aircraft retains its value over time relative to its competition.



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## **THE PILATUS PC-12 FLEET AND MARKETPLACE**

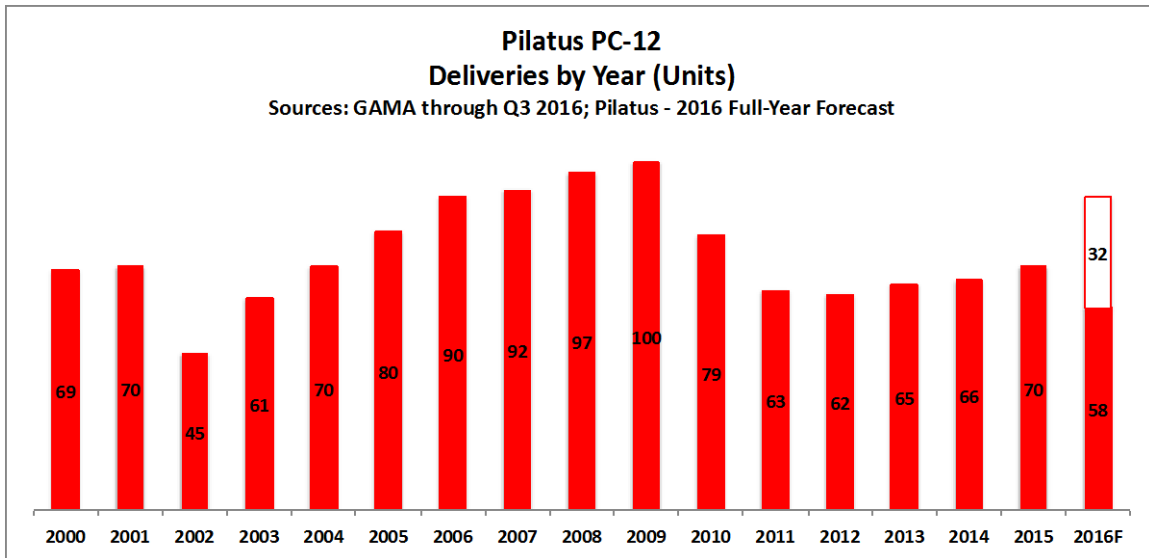
In 1989, Pilatus Aircraft of Stans, Switzerland announced its intention to enter the business and general aviation market with the single-engine turboprop PC-12. The Pratt & Whitney Canada PT6-powered PC-12 first flew in 1991, and was certified by Swiss and U.S. FAA authorities in 1994, with initial customer deliveries beginning that same year. As of the beginning of December 2016, there were 1,403 PC-12s in operation worldwide, based in 58 countries and territories. Approximately 91% of the PC-12 fleet is wholly-owned, while the remaining 9% is in shared and fractional ownership-type programs. By base location (excluding unknowns), North America accounts for 72% of the worldwide Pilatus PC-12 fleet, followed by Europe (11%), Asia Pacific (6%), Latin America & Caribbean (5%), Africa (5%), and Russia & CIS (1%). Twelve percent of all business turboprops in service in Europe – and 11% in North America – are PC-12s, higher than in any other major region.

Amongst business aircraft OEMs with at least 1,000 aircraft in service, Pilatus experienced the fastest fleet growth in the industry over the past 10 years, expanding at a 8.8% compound annual growth rate (CAGR), versus 4.2% CAGR for the business jet fleet, and just 1.8% CAGR for the business turboprop fleet worldwide. New factory deliveries of PC-12s stabilized in 2011-2012 and have been increasing slowly since then, with 90 deliveries forecast for 2016, up from 70 in 2015. Pilatus's facility investments in Switzerland and at its new completions and delivery center in Broomfield, Colorado (opening in 2018) position the company for continued growth with both the PC-12 and in-development PC-24 twin-engine light jet programs.



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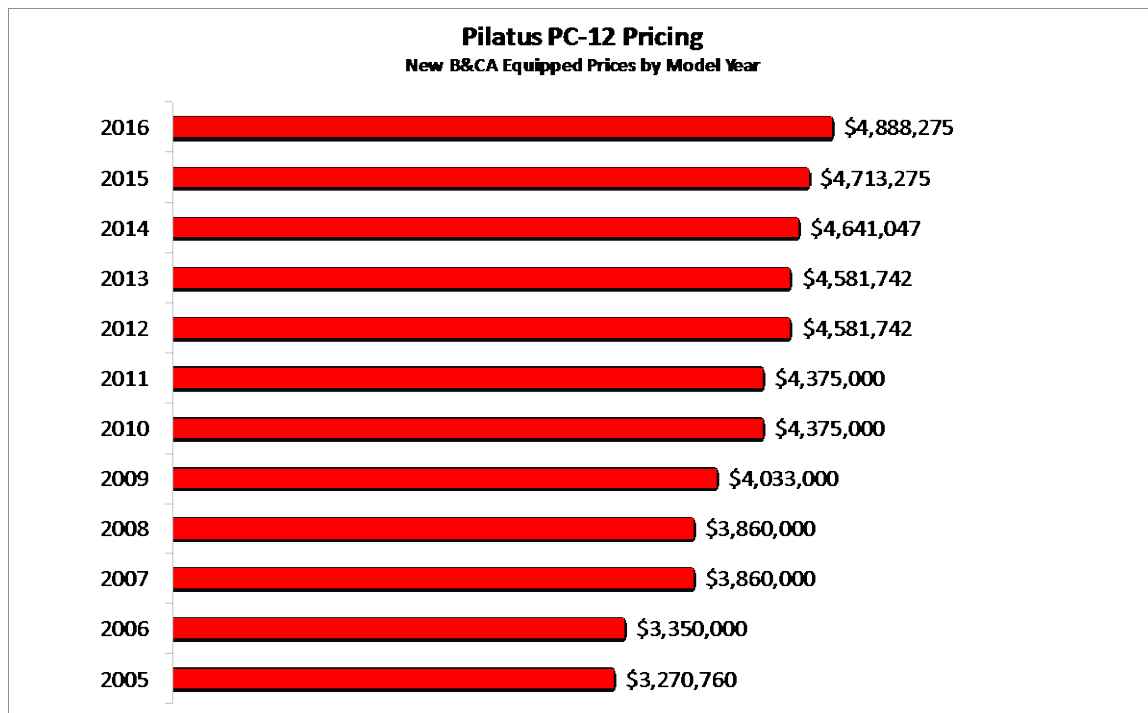




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The following chart provides details on PC-12 equipped list prices by model year from 2005 to the present. These are published annually by Business & Commercial Aviation magazine in their *Purchase Planning Handbook*, a standard reference in the business aviation industry.



Relative to 2005, PC-12 new equipped list prices have increased 49%, similar to the competition and in line with multiple product enhancements. Initial deliveries of the PC-12 NG began in 2008, featuring a more powerful 1,200-shp PT6A-67P engine, Honeywell Primus Apex cockpit, enhanced aerodynamics and higher speeds. In 2016, the PC-12 NG features an additional 5-knots of speed (top speed is now 285 knots), 10% better time-to-climb to cruise altitude, and lower cabin noise and vibration levels, enabled by a new Hartzell 5-bladed graphite composite propeller and a series of drag-reducing aerodynamic improvements. The 2016 PC-12 NG also features an all-new entry door, upgraded avionics software (Primus Apex Build 10) for ease of single-pilot operations, and interior enhancements to 6 different interior layouts designed in partnership with BMW Group's Designworks.

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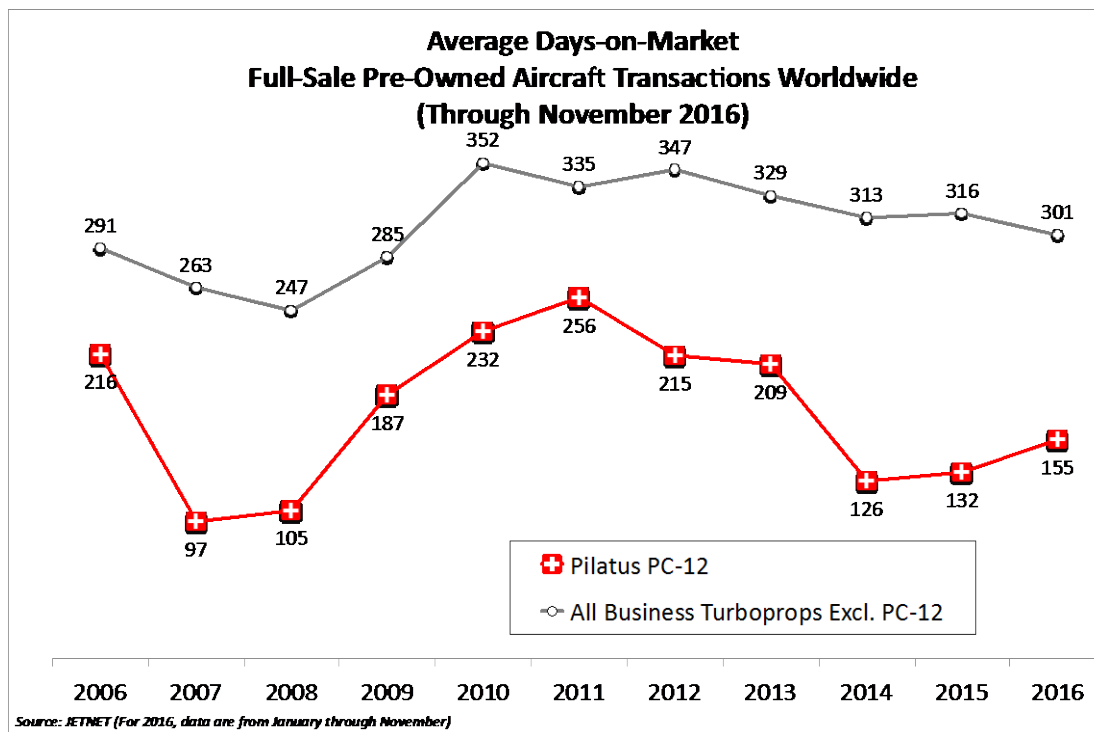


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In the pre-owned market, a PC-12 has sold 48% faster on average compared with all other aircraft in the business turboprop fleet, based on the last 5 years of marketplace data, and 44% faster based on the last 10 years. Over the last 5 years, pre-owned PC-12s have averaged 167 days-on-market before being sold, compared with 321 days for all other aircraft in the business turboprop fleet.

In 2015-2016, pre-owned PC-12s averaged just 143 days-on-market (less than 5 months) before being sold, compared with 308 days (more than 10 months) for all other business turboprops.



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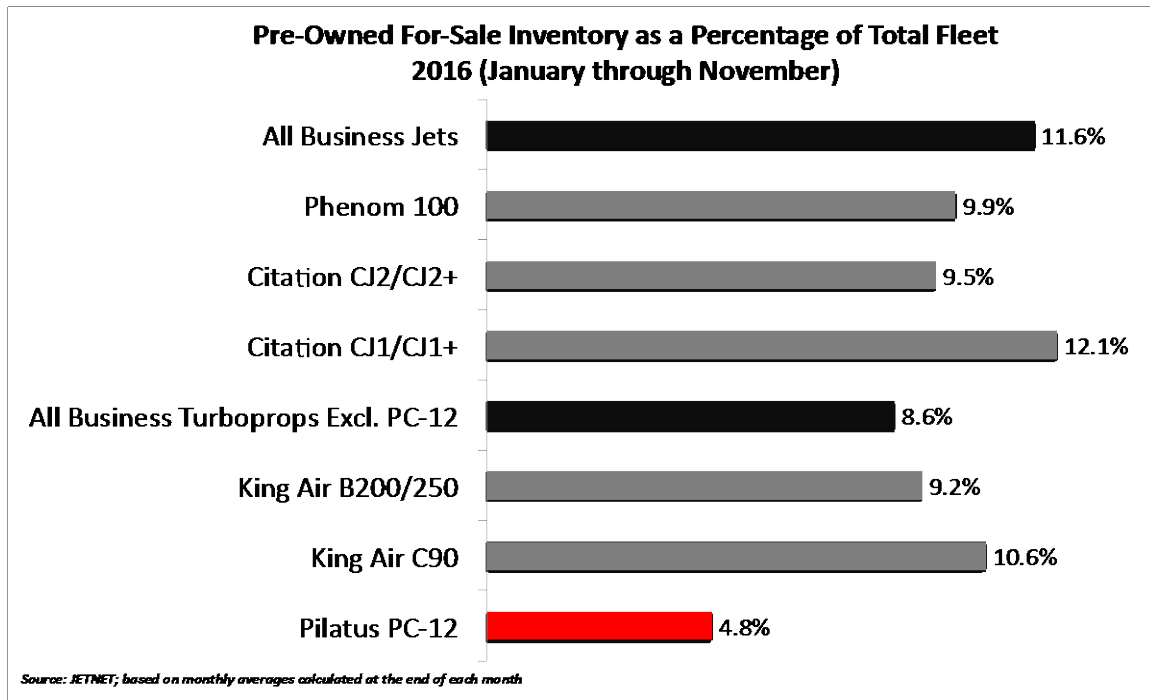
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As of the end of November 2016, just 4.8% of the worldwide fleet of PC-12s was available for sale in the pre-owned market, up somewhat from 3.7% in 2015 but remaining significantly below the direct competition and the market in general.

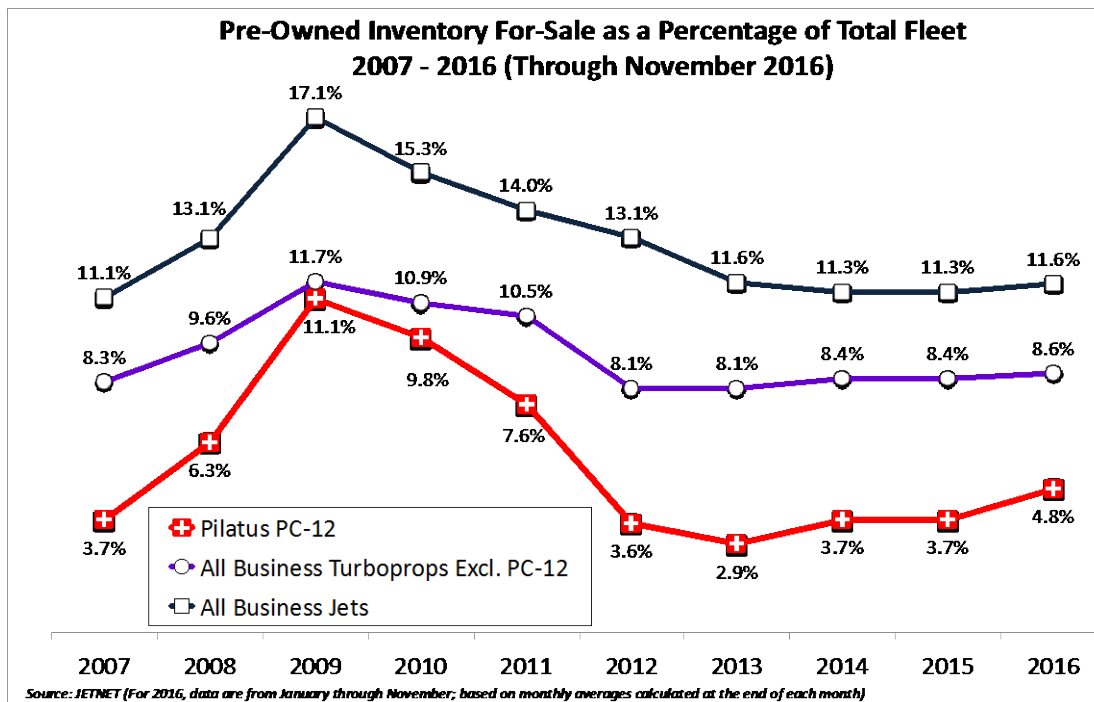




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The percentage of the fleet available for sale naturally fluctuates up and down in step with business cycles. Inventory for sale returned to pre-recession levels in 2012 for the PC-12 and for business turboprops, and in 2014 for business jets. Inventory for sale has been increasingly modestly throughout 2016 across most categories of business aircraft, and the PC-12 was no exception. Nevertheless, as of the end of November 2016, just 61 PC-12s (including 26 PC-12 NG models) were being offered for sale in the pre-owned market out of a worldwide fleet of more than 1,400 aircraft.



Well-maintained, low-time aircraft continue to be in strong demand, and the PC-12 aircraft has an almost cult-like following amongst owner / operators who know it best for its rugged and highly-engineered design, construction quality, operational reliability, range / payload capability, rugged airstair and “bring it all on” cargo door, and “go anywhere” runway performance, including at unimproved airfields. Customer loyalty to Pilatus and the PC-12 is very high, and the Pilatus brand is highly regarded within the business aircraft owner / operator community, based on on-going customer surveys conducted by JETNET iQ.

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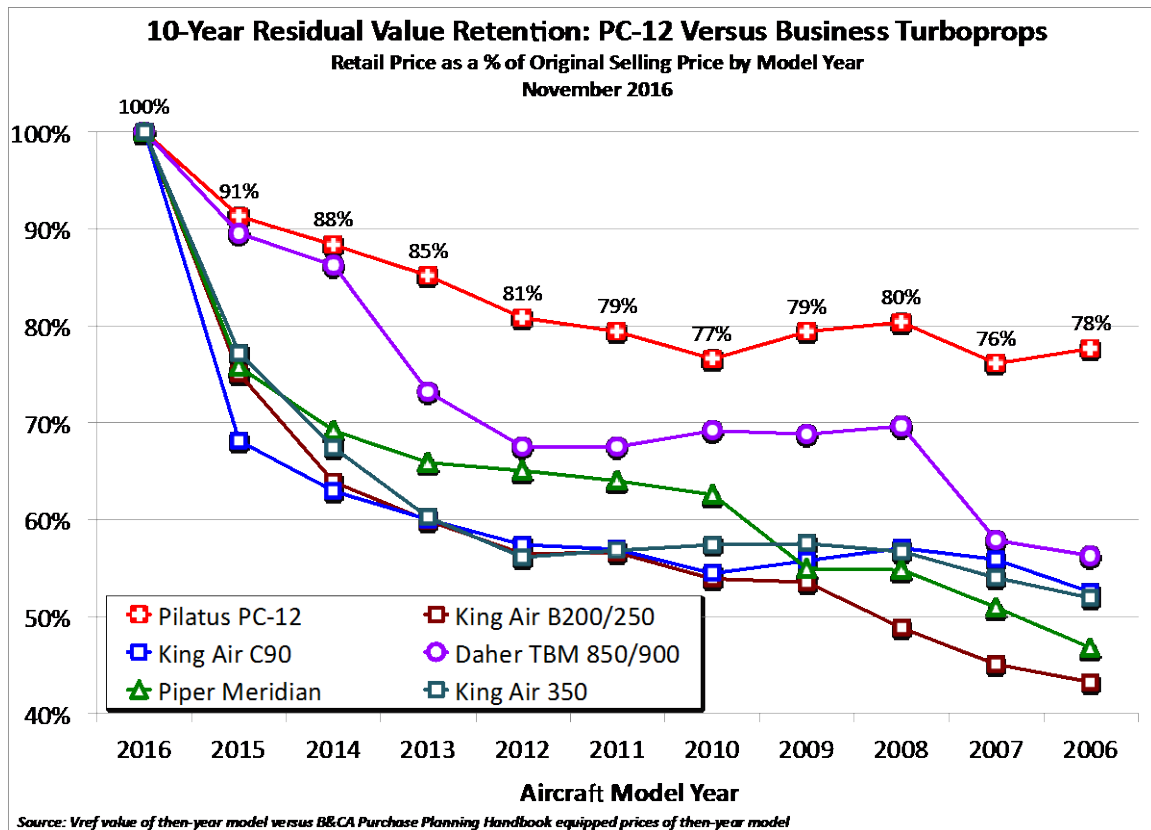


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## PILATUS PC-12 VALUE RETENTION

The PC-12 stands out amongst its competition in retaining its market value over time. The relatively few PC-12 aircraft that are sold in pre-owned markets are currently retaining 75-80% of their original selling prices 10 years after factory delivery, a performance that is simply unmatched in the business aircraft industry. This is a testament to the PC-12's quality, reliability, and unique features and capabilities. It also reflects high level of customer satisfaction that commands loyalty to the product and the brand. Pilatus Aircraft has a reputation for doing what it does very well, and maintains a disciplined approach to product development, production, and new aircraft pricing. This is a formula that generates residual value retention, providing aircraft buyers of both new and pre-owned Pilatus PC-12s with peace of mind that they have made a wise investment decision.



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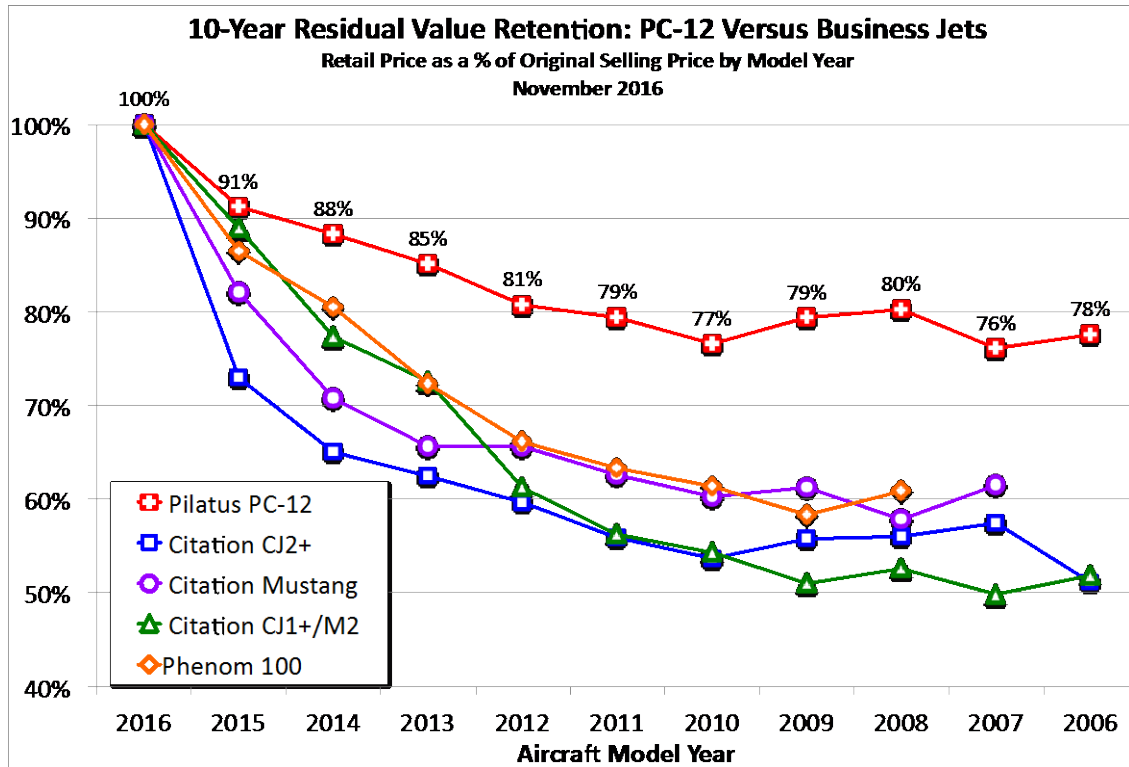
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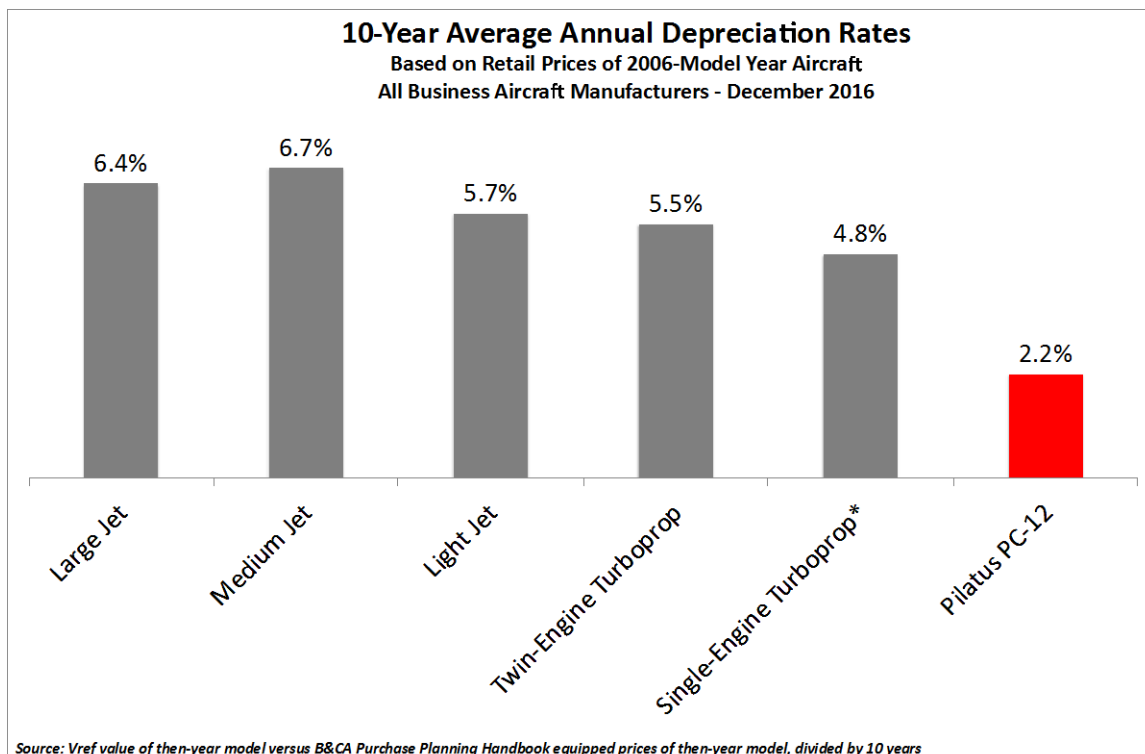
Source: Vref value of then-year model versus B&CA Purchase Planning Handbook equipped prices of then-year model



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Depreciation rates for the PC-12 have averaged just 2.2% per year over the past 10 years, an industry-leading performance that continues to differentiate the Pilatus PC-12 from its competition and the rest of the business aircraft market.



Source: Vref value of then-year model versus B&CA Purchase Planning Handbook equipped prices of then-year model, divided by 10 years

\* Excluding Pilatus PC-12

While business aircraft are, like all forms of transportation equipment, acknowledged to be depreciating assets, aircraft owners, operators, lenders and lessors should take comfort in the fact that the PC-12 has consistently outperformed its peers in retaining its market value. With a relatively flat depreciation curve, the PC-12 provides value retention that is more than simply a “nice-to-have” for a buyer. This value is itself an asset that delivers stronger returns on investment and provides higher trade-in currency when the time ultimately comes for an owner to upgrade to a new aircraft.

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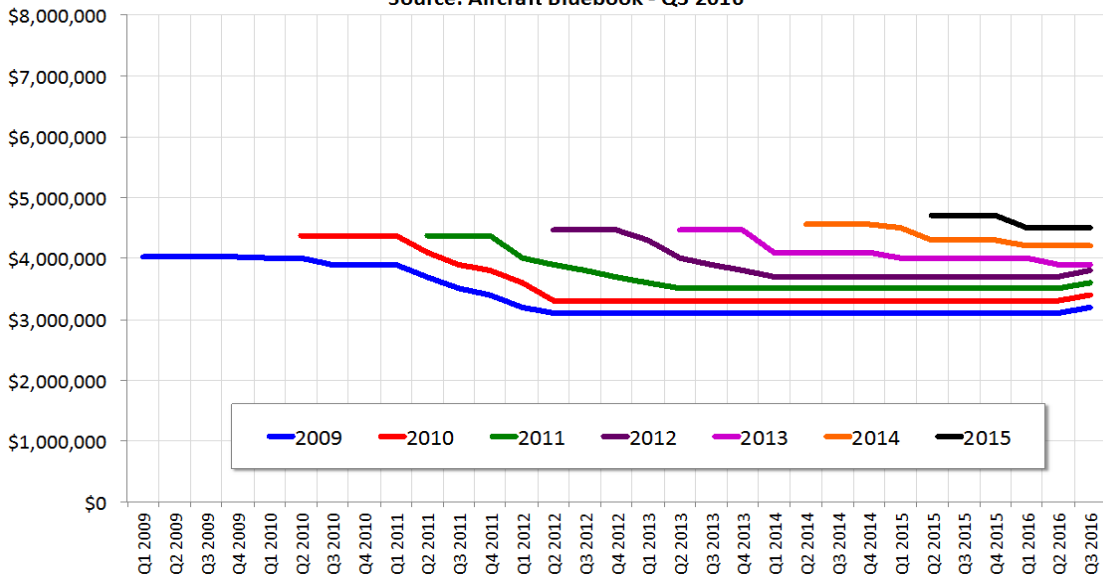
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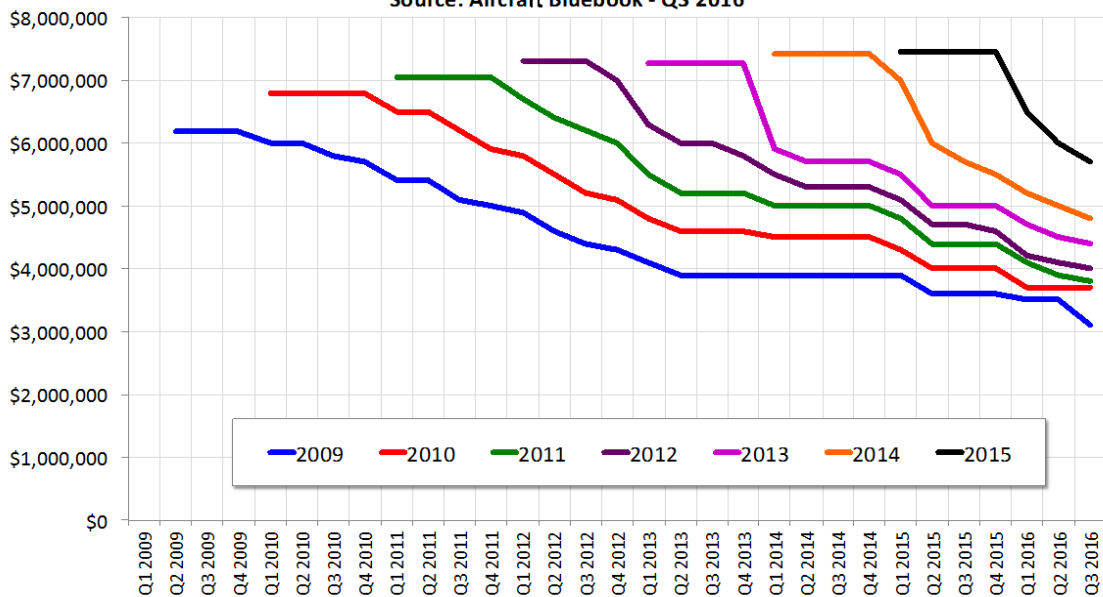
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**Pilatus PC-12/47E NG**  
**Average Retail Value by Model Year (\$US)**  
 Source: Aircraft Bluebook - Q3 2016



**Beechcraft King Air 350 / 350i**  
**Average Retail Value by Model Year (\$US)**  
 Source: Aircraft Bluebook - Q3 2016





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## **THE BOTTOM LINE**

Business aviation stakeholders – including aircraft owners, operators, lenders and lessors – should take note of the unique market performance, competitive positioning, and value retention track record of the Pilatus PC-12. With Swiss design expertise, high-quality engineering and production savvy, and pricing discipline, the PC-12 has surely hit a market “sweet spot”, offering unmatched customer appeal and a foundation of solid value in the market. This is a testament to a highly focused organization that melds Swiss-quality engineering and design with attention to detail in the on-going care of customers. In a business world where the future seems increasingly unpredictable, the Pilatus PC-12 stands out as a high performer, both as a fast and reliable form of business, personal and utility transportation, and as an asset that retains its value over the long term.

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### **DATA SOURCES**

Pre-Owned Retail Prices: Vref – Q4 2016 version; Aircraft Bluebook – Q3 2016 version

*Note: Vref retail prices by aircraft model year represent market averages in \$U.S. as reported by dealers, lenders, buyers and sellers during the previous quarter. Retail prices assume typical annual utilization (about 300 hours per aircraft per year), no damage history, original and complete maintenance logbooks, mid-life engines and maintenance inspections, and owner / operator compliance with all mandatory service bulletins and airworthiness directives.*

New Original Equipped List Prices: Business & Commercial Aviation Purchase Planning Handbook

Fleet, Pre-Owned Inventory For Sale, and Days-on-Market: JETNET – December 2016

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*Rolland Vincent Associates, LLC, an aviation consulting firm, draws from almost 35 years of aviation experience, delivering trusted market research, strategy, business & product development, and industry analysis. We are here to help you understand customer needs and preferences, design products and services to delight your customers, and discover and seize business opportunities. We provide you with practical, intelligent solutions to unleash the power of your business and navigate for global aviation leadership. In 2010 and in partnership with JETNET LLC, we created JETNET iQ, a syndicated quarterly research and forecasting service for business aviation. Proprietary quarterly surveys of business aircraft owners and operators worldwide are cornerstone features of JETNET iQ.*