Owner & Pilot

ADVANTAGE

A Magazine for Owners and Pilots from Augustine Publications





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Growth & Deadlines



The end of 2018 came with the acquisition of Skytech's first Pilatus PC-24.

which has done more than impress since its introduction to the world. Although inherently different from it's turboprop sibling, it maintains the obvious ingenuity and Swiss quality of the PC-12 NG - as well as many of its most popular

Charter remains consistently busy, allowing us to expand our fleet and our staff to accommodate the welcome growth - despite unfortunate delays resulting from the government shutdown. As long as further delays are kept to a minimum, it's our hope to see a PC-24 added onto the certificate in the

Speaking of charter, with the ADS-B deadline quickly approaching and a lack of urgency by many aircraft owners, there is likely to be a spike in part 135 transportation due to an influx of grounded aircraft awaiting compliance. It's best not to delay this installation any longer if you're hoping to maintain the ability to fly in most controlled airspace.

Skytech, Inc., publisher of this magazine is an aircraft sales and service company with FBOs in Westminster, MD (DMW), Rock Hill, SC (UZA - Charlotte Metro Area) and Administrative Headquarters in Baltimore, MD (MTN). Your thoughts, suggestions, comments and criticism are important to us and we will always welcome reader feedback.

Please respond to: Dave Conover

Executive Vice-President dconover@skytechinc.com

Market - SNAPSHOT

PIPER MERIDIAN

Information provided by JetNet (Current as of 3/31/19)

Manufacturer: **New Piper Aircraft**

Serial # Range: 4697001 - 4697581

Weight Class: Light

Years Built: 1999-2014

Turboprop Type:

MARKET SUMMARY

General Market Price Range:

In Operation:

On Exclusive:

For Sale:

Leased:

\$650k - \$1,560k

41 (7.5% of In Operation)

26 (63.4% of For Sale)

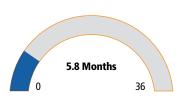
17 (3.1% of In Operation)



The Piper Meridian is a single-engine turboprop aircraft with six-place seating and a pressurized

COMPOSITION	LOW	AVG	HIGH
Asking Price:	\$625,000	\$1,107,000	\$1,550,000
MFR:	2001	2008	2015
Days on Market:	7	315	4,042
Airframe Time:	290	1,409	3,128

ABSORPTION RATE



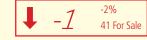
OWNERSHIP (In	Operation)
Whole:	529
Shared:	17
Fractional:	0
Total Aircraft:	546
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LIFE CYCLE				
In Production:	0			
At MFR:	1			
In Operation:	546			
Retired/In Storage:	27			
Total Aircraft:	574			

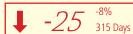
AVG ASKING (12 MONTHS)

% FOR SALE (12 MONTHS)

FOR SALE (12 MONTHS)



DAYS ON MARKET (12 MONTHS)



Tax + FACTS

Life after the Elimination of Like Kind Exchange for Business Aircraft

The Tax Cuts and Jobs Act of 2017 (TCJA) brought us 100% bonus depreciation and other positive changes that benefited the general aviation industry tremendously. It did bring about some changes that can negatively impact aircraft owners who are considering upgrading to another aircraft. TCJA eliminated Section 1031 Like Kind Exchange for personal properties, which include business equipment and aircraft, beginning on January 1, 2018. This article will illustrate the impact and discuss some planning ideas that can mitigate the potential negative effect of this law change. Here is an example of an aircraft owner selling an existing aircraft and purchasing a replacement aircraft.

Fair Market Value of current aircraft: \$1,000,000 Tax basis of current aircraft: \$-0-**Purchase price of replacement aircraft:** \$2,500,000

	1031 EXCHANGE	NO 1031 EXCHANGE	DIFFERENCE
Taxable Gains	\$ - 0 -	\$1,000,000	\$1,000,000
Depreciation	(\$1,500,000)	(\$2,500,000)	(\$1,000,000)
Net Change	(\$1,500,000)	(\$1,500,000)	\$ - 0 -
Net Change in Tax Liability (40%)	(\$600,000)	(\$600,000)	\$ - 0 -

Assumptions:

- 1. Current aircraft is fully depreciated with zero tax basis
- 2. Taxpayer qualifies for 100% bonus depreciation
- 3. The transaction is structured as a trade-in or a like kind
- 4. Depreciation basis for replacement aircraft is reduced by gains on the sale of current aircraft
- 5. Combined federal and state income tax rates 40%
- 6. Both transactions will take place and complete in 2019

OBSERVATIONS

1. Based on the above assumptions, the taxpayer's federal income tax return position will be exactly the same with or without the like kind exchange regulations. The transactions will be treated as a sale with gain recognition,

- and the replacement aircraft will be depreciated at its full purchase price.
- 2. State income tax impact: some states have "de-coupled" their depreciation rules from federal regulations and do not allow for 100% bonus depreciation when determining state taxable income. This will create a timing difference between federal and state depreciation deductions. State taxable income can be higher in the year of acquisition.
- 3. As illustrated above, when the replacement aircraft is purchased in the same tax year as the sale of the current aircraft, the bottom line to the taxpayer is the same, as if like kind exchange regulation is in effect. However, if the replacement aircraft is not purchased until the following tax year, this will increase taxable income due to recapture gain recognition.

Over the course of two years, there is a net reduction of \$600,000 in income tax payment. But the cashflow requirement for 2019 can be a burden for the taxpayer who is acquiring another aircraft.

If you are ordering a new aircraft with an aircraft manufacturer, production delays may push delivery date to the next tax year. Unexpected maintenance issues at pre-purchase inspection may delay closing for a preowned aircraft. As you contemplate an aircraft upgrade, beginning the selling and buying process earlier can avoid the potential dilemma of not being able to close the transactions by year end. •

> For the full article, contact Daniel Cheung at www.aviationtaxconsultants.com.

Daniel Cheung, CPA is a co-founder of Aviation Tax Consultants, LLC in 2003. He is a frequent contributor to business aviation journals and speaker at aviation events across the country. ATC recently opened a satellite office at Scottsdale Airport to better serve its clients in western United States.

Aviation Tax Consultants, LLC (www.aviationtaxconsultants.com) assists aircraft purchaser in acquiring aircraft in a tax efficient manner. Our consulting services include the elimination or reduction of sales and use tax at the time of purchase, maximizing income tax savings, controlling the cost of personal use of aircraft, complying with passive activity loss and related party leasing rules and Federal Aviation Regulations. Cooperation with client's current tax and legal advisors is welcome and encouraged



PUBLISHER Dave Conover

EXECUTIVE EDITOR AND WRITER Justin Lazzeri

> COLUMNIST Rick Shepard

GRAPHIC ARTIST Jennifer Longo

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Your opinions, suggestions and ideas for new articles and content are important for continuing improvement and growth that will serve all our readers

> Email us at Advantage@Skytechinc.com 800-394-1334

> > Thank you!

The Pilot-In-Command is solely responsible for the safe and proper operation of his/her aircraft and it is the responsibility of the pilot-inwith that aircraft's Pilot's Operating Handbook and other official manuals and directives.

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What's the Big Deal?

BY RICK SHEPARD - Skytech Piper Aircraft Sales



The G1000 NXi is the most connected G1000 cockpit to date."



Believe it or not, June of 2019 will mark the fifteenth year since the introduction of the Garmin G1000 Integrated Flight Deck. Fifteen years may seem brief, but it is long enough to experience a revolution, technologically speaking. To put that into perspective, when Garmin announced this new glass cockpit, George W. Bush and John Kerry were campaigning for the presidency, and some of us may have been carrying around a Motorola Razr flip-phone. Cell phone manufactures were boasting about a revolutionary new feature...a one-megapixel camera, and the first iPhones were still years away.

The G1000 NXi is the next generation of Garmin's popular G1000 avionics suite, which has come to be a favorite of both students and seasoned pilots. When asked to describe the G1000 NXi in a few words, I would personally say, "feature rich." Although, on the surface these two glass cockpits may appear very similar, it's not until you "look under the hood" that you will notice the differences with the NXi system. I have often heard people describe the NXi system as simply "faster and prettier." Both are correct, but it takes flying behind this new system to truly appreciate the changes.

As soon as you flip on the avionics master, you should get the idea that you are dealing with a different animal. The NXi boots up in under ten seconds, while previous G1000 setups took 25 seconds or more to come alive. This is courtesy of the new dual core processors that have superior processing and memory to drive the displays today, as well as support future features. To really feel the horsepower of the processors, pay particular attention to the zooming, panning, and redraw speeds of the NXi. As technology improves, you would expect size, weight, and energy consumption to decrease, which is exactly what has happened to the supporting components behind the panel. The NXi display units (GDU 1050's) feature a more refined and modern look, better resolution, brightness, and clarity. These new displays also feature font enhancements and COM frequency decoding. A pilot selectable HSI map can be displayed in the pilot's primary field of vision to improve situational awareness. Moving to the center display or the MFD, a slew of geo-referenced IFR and VFR maps are now available to the crew, such as Low and High altitude IFR charts, VFR sectionals, and Terminal Area charts. If that wasn't cool enough, the option to now split the MFD and customize the display for the appropriate phase of flight is now possible. As far as approach plates are concerned, you now have the choice of

"....the option to now split the MFD and customize the display for the appropriate phase of flight is now possible."



switching from either Jeppesen ChartView or the Garmin FliteCharts without the need to reload the system software. Garmin WireAware and powerline strike avoidance take into account the locations of powerlines and elevated wires with respect to altitude information on the moving map, and provides both aural and visual alerting when operating near powerlines.

Autopilot-coupled visual approaches are now an option that give you precision guidance in VMC conditions. This safety enhancement will draw a 3-degree glidepath to the runway threshold and is a great tool for flying stabilized visual approaches at unfamiliar airports. Further enhancing situational awareness is the VSD display, giving you a profile view of your flight plan to incorporate terrain and crossing restrictions.

Even before you take the runway, the NXi acts like a second set of eyes on the ground with its Terminal Safety Solutions. SurfaceWatch, with its runway monitoring and alerting, will aid in preventing runway incursions as well as ensuring the aircraft departs and lands on the selected runway, which is always highlighted for the flight crew. Prior to takeoff, the NXi monitors preset parameters that will ensure the aircraft is properly configured for departure. If not properly configured, the NXi will give both aural and visual alerts the moment takeoff thrust is applied. Prior to landing, an automatic yaw damper disconnect feature will turn off the yaw damper at 100 feet AGL to eliminate the risk of unwanted flight control forces during the landing phase. Enhancing the already digital pressurization for the M350 and M500, the NXi now references the destination elevation right from the flight plan, reducing the pilot

The G1000 NXi is the most connected G1000 cockpit to date. Paired with the FlightStream 510, the Garmin Pilot app, and a mobile device, the NXi is capable of wireless flight plan and database transfers. To round out the connectivity options of the M350 and M500, all NXi airplanes will be equipped with a Garmin 350c Bluetooth audio panel.

The NXi is a clear evolution in flight deck technology, however, legacy G1000 users will feel right at home. While it's hard to believe that G1000 is yesterdays technology, NXi should instill confidence that some variant of G1000 will be with us for many years to come. •



Rick Shepard - *Piper Aircraft Sales (S. VA, NC, SC)*PiperSales@skytechinc.com

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Garmin G1000



Garmin G1000 NXi





HIGH FLYING

The New RVSM Rule

As originally appeared in the September/October 2018 issue of Business Aviation Advisor

BY DAVID T. NORTON, JD, MBA, ATP

Shackelford, Bowen, McKinley & Norton, LLP dnorton@shackelford.law

The FAA just made your life a little easier. As of January 22, if your aircraft is properly equipped with ADS-B Out, you are automatically authorized to fly in domestic RVSM airspace.

WHAT DOES THAT MEAN?

A key air traffic control function is to keep aircraft safely separated. A basic way of doing so is to have aircraft fly at different altitudes. But this works only if everyone's aircraft altimeter - the instrument that tells you your altitude – is accurate. Altimeters originally were very accurate at lower altitudes; less so the higher you flew. So the norm was for air traffic control (ATC) to instruct different aircraft to fly at specific altitudes that were at least 1,000 feet apart from each other when flying below 28,000 feet, and at least 2,000 feet apart when flying above 28,000 feet.

That would ensure enough of a safety buffer between what the altimeter was saying and what the aircraft's actual altitude might be, to be sure two airplanes were not inadvertently flying at the same altitude (even if their instruments said they were 2,000 feet apart) when above 28,000 feet. But flying above 28,000 feet, where half as much airspace is available, typically is where you want your jet aircraft to be in order to maximize air speed and fuel efficiency.

By the early 2000s, technology had improved to the point that ATC could begin to use only a 1,000 foot separation above 28,000 feet (thus doubling the airspace available to jet aircraft), but this would work only if all aircraft in that airspace had the new, more accurate technology. The FAA therefore issued a rule stating that if an operator wanted to fly in this newly "reduced vertical separation minimum" (RVSM) airspace, that is, the airspace above 28,000 feet and below 43,000 feet, then specific permission was needed.

If the operator demonstrated an ability to meet all applicable technical requirements, the FAA would grant a "letter of authorization" (LOA). Periodically, the operator would have to fly over specific ground stations able to measure the actual altitude of the aircraft, to confirm that the technology was actually working. Unfortunately, the ongoing problem has been that obtaining these LOAs can be extremely difficult and time consuming, and you can't cruise in RVSM airspace until you have one.



During the last ten years, however, two key things have happened. First, most of today's aircraft meet all of the original RVSM requirements. Second has been the simultaneous development of a much larger, more comprehensive set of technologies to significantly improve the overall safety and efficiency of the U.S. air traffic control system.

Key to this effort is "Automatic Dependent Surveillance-Broadcast Out" (ADS-B Out), which is much more accurate than ground-based radar, and which allows the FAA to track very accurately the aircraft's actual position, altitude, velocity, identification, etc. – in real time. Federal Aviation Regulation (FAR) 91.225 governing ADS-B Out equipment and use requires that all aircraft operating in U.S. airspace have a certified GPS position source teamed with a transponder that is capable of automatically transmitting data from the aircraft to the ATC without input from the pilot. ADS-B also gives pilots immediate access to air traffic and weather services.

To its great credit, the FAA realized that, as aircraft operators install this new ADS-B Out technology, it can safely and automatically grant permission to those operators to fly in domestic RVSM airspace. This saves both the FAA and each operator an enormous amount of time and energy, reducing paperwork and processing requirements, while maintaining a higher level of safety, better situational awareness, and more efficient,

The new RVSM rule is a further great incentive to encourage you to install ADS-B Out in your aircraft before the January 1, 2020 deadline. •

David T. Norton, JD, MBA, ATP, a graduate of the USAF Academy, heads the aviation law practice at Shackelford, Bowen, McKinley & Norton, LLP, and is an internationally recognized aviation lawyer and an active pilot.

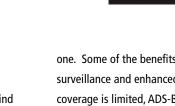




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BY JUSTIN LAZZERI - Vice President of Aircraft Operations



For many pilots and aircraft owners, flying in controlled airspace is absolutely essential. This also means that those still not equipped with Automatic Dependent Surveillance-Broadcast (ADS-B) could find themselves unable to enter such airspace in the not-so-distant future. The looming January 1, 2020 deadline to equip every necessary aircraft with ADS-B has been incessantly echoing throughout the industry over the last several years.

There are few exceptions that would allow one to opt-out of the mandatory installation, such as not having a need to fly in controlled airspace and owning an aircraft without electrical systems. However, there are still thousands of aircraft out of compliance. Resistance to the mandate is resulting in congested shops and, for many pilots, the imminent inability to fly as needed.

Although tedious for some, the requirement of ADS-B is an important stepping stone toward making aviation safer and more efficient for every-

one. Some of the benefits include better accuracy for aircraft controller surveillance and enhanced situational awareness. In areas where radar coverage is limited, ADS-B can make a world of difference. Ultimately, the benefits outweigh the costs.

The January 1, 2020 deadline is non-negotiable and delaying could put your future travel plans at an unnecessary and inopportune stand-still. Call your maintenance facility to schedule your installation before you find yourself grounded. •