

The

JANUARY 2016

TWIN CESSNA

Flyer



FEATURING:

SIMEONE T310R: ONE OF THE BEST
TWO 310s TO THE BAHAMAS
GENESYS 2100 AUTOPILOT PIREP
WHAT DOES IT COST TO OWN A 414?
READERS WRITE AND MUCH MORE...

Supporting Twin Cessna Owners Worldwide since 1988

GENESYS 2100 AUTOPILOT PIREP

by Jamie Luster, Genesys-Aerosystems



Two Twin Cessna owners extol the virtues of the Genesys Aerosystems IntelliFlight 2100 fully digital, three-axis autopilot.



The Genesys Aerosystems IntelliFlight 2100 is a modern, fully digital autopilot currently certified for 400 series Cessnas.

Patrick Dougherty is the CEO of Dougherty Forestry Manufacturing, based in Hinton, OK, where his company manufactures industrial equipment used for cutting trees.

Dougherty Forestry owns a Cessna 414 built in 1981, which his company has operated for about a year. Prior to the purchase, the company had been leasing a 1974 Cessna 414.

“Before we got the 414 we were also dry leasing a Cessna Citation but the new 414 allowed us to consolidate all of our flying into one aircraft,” Dougherty said. (He also still owns a Cessna 177.)

“When we bought the 414 we put a fresh coat of paint on it and new avionics,” Dougherty stated. “There are no serious ADs on the airplane and it has a 200-knot airspeed. We have a fully digital, pressurized aircraft.

“It’s actually nice for us,” he continued. “From Hinton we can be at either coast in about five hours. We made it to Ohio in three hours a few weeks ago. We could not do that on the airlines. There’s just no excuse not to have a general aviation airplane.”

Dougherty’s company sells its equipment through a dealer network and uses the aircraft to meet with its dealers. “We have a short lead time and it gives us a huge advantage and flexibility with large geographic distances,” he said. “A lot of our competitors only sell locally. They can’t go very far.”

Dougherty says that the 414 is an excellent fit for his company because of its low fuel burn. “The Citation we were using burned three times the fuel,” he said.

Dougherty is a pilot but not yet checked out on the 414. He uses a contract pilot for flying the 414. That way, “I can focus on the business and let the pilot do the flying,” he said, clearly putting safety first.

A Fully Digital Panel

“We put a lot of new avionics in the 414 when we bought it,” Dougherty said. The company’s 414 is now equipped with two glass-panel Garmin G600s with a PFD and MFD, and a Garmin GTN 750 GPS with remote transponder. There is also a Mid Continent SAM (Standby Attitude Module) installed.

Dougherty said that the autopilot that was previously installed in the aircraft – a two-axis system with a yaw damper – was OK, but did not do very well on difficult IFR approaches.

When it came time to upgrade the panel, he chose the Genesys Aerosystems IntelliFlight 2100. The 2100 is a three-axis fully-functioning autopilot designed for the twin and turbine markets. The system offers built-in Altitude Preselect, Indicated Airspeed Hold as well as NAV, Heading and Altitude Hold.

“Our avionics guy started the conversation with Genesys,” Dougherty stated. “I’m very pleased with that decision.” Dougherty’s aircraft was actually used to get the STC at the Genesys Aerosystems’ facility in Mineral Wells, TX.

The 2100 has been in use for about four months and Dougherty has had five or six long flights with it. “Enough to see

how stable it is,” he said.

“This system has been rock solid,” Dougherty said. “We’ve been extremely impressed and can’t say anything bad about it. S-TEC [Genesys Aerosystems] did a great job with this.”

The 2100 autopilot is designed with GPSS roll steering, which allows the autopilot to fly flight plans and approaches by sequencing to the next way point without any interaction from the pilot. The autopilot will capture the glideslope of a precision approach and easily fly the aircraft down to minimums. “In a heavy IFR approach it’s always on that GPS line,” Dougherty explained. “It’s handling the vertical component of the approach and is also very redundant.”

“We are a family company and I’m big on safety and technology,” Dougherty stated. “I have a certain amount of confidence in the 2100, and with an autopilot, digital is certainly more accurate than analog.” The 2100 utilizes information from dual ADAHRS (Air Data and Heading Reference Systems) to guide the aircraft based upon the aircraft’s attitude. Because the ADAHRS uses solid state gyros and the interface



Patrick Dougherty’s 414. The 2100 is a 21st century autopilot that matches the quality and capability of modern glass panels.

is digital, the autopilot is a much more stable and responsive system. Options for the attitude source include dual EFIS systems or single EFIS with standby ADAHRS such as the Mid Continent MD-302 SAM or remote mount Genesys Aerosystems ADAHRS.

Dougherty said that he now has great situational awareness with the Cessna 414.

“With the fully digital panel and the 2100 autopilot, I’ve taken as many of the variables of flying away as possible,” Dougherty said.

“The 414 is a phenomenal airplane,” he added. “I can put seven people in it. It’s a fully modern aircraft for a total \$500,000 investment.”

“(the Genesys IntelliFlight 2100) makes the 55x and 60-2 pale by comparison.”

SNFLK Leasing and a Golden Eagle

Dan Snow is the majority shareholder of SNFLK Leasing, a company based in Andrews, TX that makes environmental cleaning equipment, particularly for radioactive materials. He owns and flies a Cessna 421 Golden Eagle, built in 1973. He’s had the aircraft since 2008, and uses it for business and pleasure equally. Snow has been flying for 30 years and has logged 3,400 hours of flight time.

Snow’s typical mission for business is a 300- to 400-mile trip with one to five people on board. The Golden Eagle panel is equipped with a Garmin GTN 600-series GPS with display, and dual Garmin 750s for the comm and nav. Snow had the Genesys Aerosystems 2100 autopilot installed in April of last year and has been extremely pleased with it.

“I had the S-TEC 55x before and the company was offering an upgrade program for its customers,” said Snow. The 2100 uses the same servos as the 55X so the upgrade is an easy installation. While not an exact slide-in replacement, the installation only requires a slight modification to the

panel and some additional wiring. However, if a yaw damper is not installed it does require a yaw servo as well.

Snow said that he always files for IFR even when it’s VFR conditions, making the autopilot even more useful. The 2100 can be used from takeoff to touchdown and is specifically designed for larger aircraft ensuring stable flight whether in the sun or the clouds. Aircraft owners can be assured the 2100 will get them to their destination safely and efficiently.

“The 2100 is an awesome piece of technology in motion,” Snow said. “Its command response time is without delay and it captures every CDI without hesitation on all approaches I have put it through. It makes the 55x and 60-2 pale by comparison.”

Genesys Aerosystems offers special upgrade pricing for S-TEC 55X customers wanting to upgrade to the 2100.

Editor’s Note: *Twin Cessna owners have very few options for modern, digital autopilots. The 2100 is one of them. While not cheap, the \$39,995 retail price is in line with other modern autopilots with similar capabilities.*

Currently the 2100 is only certified for the Cessna 414 and 421, however Genesys has told us if they get orders from at least ten 340 owners, they will add that model plus the 335.

If interested, contact Jamie Luster at Genesys via email at: Jamie.Luster@genesys-aerosystems.com



Genesys Aerosystems IntelliFlight 2100 Digital Flight Control System

Designed around putting aircraft owners in control of their aircraft through every phase of flight

- Superior Aircraft Management: From wheels up to touchdown, 3-axis autopilot reduces pilot workload while flying IMC.
- Enhanced Safety: Precision you need when flying an instrument approach down to minimums.
- Greater Reliability: 100% digital, with solid-state gyros and advanced servos and sensors.

Powerful Performance: For piston twins, turbine twins, and light jets that need to smoothly handle busy airspace.

Features:

- Indicated Air Speed (IAS) Hold
- Control Wheel Steering (CWS)
- GPS Steering
- Heading Preselect and Hold PFD Integration
- Altitude Preselect and Hold with Autotrim
- Digital Vertical Speed Command
- Yaw Damper
- Course Intercept Capability
- Dual Mode-HDG/NAV & HDG/APR
- VOR/LOC/GS/REV/GPS Course
- Flight Director
- Heading Control
- Vertical Speed Control

I lost an engine on takeoff...!



Martti Matheson

“The left engine... the critical engine...!

And I’m alive to tell you about it, thanks to my recurrent training.

At Nashua Flight Simulator, my sim training experience provided safe, professional

and effective scenario-based training focused on the engine-out procedure...and it paid off in spades. Their two-day training program elevated my ability to be sharp and proficient in emergency procedures and more consistent with the flows.”

Nashua Flight Simulator...there’s no better way to keep proficient and to improve piloting skills. And it just might be a lifesaver...!



TRUSTED. EXPERIENCED. AFFORDABLE.

Turbo Prop - Multi-Engine • High Performance Single Engine
Tel: (603) 880-0044 • NashuaFlightSimulator.com