

# Clear Skies Ahead

*Electrical engineer combines experience with love of aviation*

STORY BY CHRISTINE KNAUER

For 20 years, Robert Ross managed an electronics research and development firm in Charlottesville, Virginia. He has a bachelor's and a master's degree in electrical engineering and nine patents for a variety of electronic instruments, including those used worldwide for monitoring corrosion in steel-reinforced concrete structures.

After three decades as an electrical engineer, Ross decided to channel his expertise into aviation. In 2013, he started Clear Sky Aviation, providing radio and instrument maintenance, troubleshooting and repair for Part 91 general aviation single- and twin-engine aircraft.

"Clear Sky Aviation is my retirement career," said Ross, a private pilot and A&P mechanic who built his pride and joy, a 2012 Vans RV-12, that he affectionally calls Lil' Cowboy. "It is the perfect marriage of my experience as an electrical engineer and my love of aviation."

Charlottesville is situated in the heart of Virginia at the foothills of the beautiful Blue Ridge Mountains. It is the home of three U.S. presidents and the University of Virginia. Ross operates Clear Sky Aviation out of two locations – one north of Charlottesville at the regional airport, and another southeast of the city in a quiet business park.

"We have two facilities," he said. "Our radio and instrument repair shop and office is about 1,000 square feet

and is located off airport premises. Our Charlottesville–Albemarle Airport location is about 1,000 square feet of hangar space that we sublease from Landmark Aviation."

In early 2015, Ross received his FAA repair station certificate and recently became an authorized distributor for BendixKing. During the certification process, he turned to Aircraft Electronics Association resources for guidance.

"I reviewed the entire AEA Repair Station Training Course on the AEA website, and I found it to be extremely helpful," he said.

Ross provides altimeter, transponder, and airspeed and pitot-static systems test and inspection services for both type-certificated and experimental general aviation aircraft. He also

specializes in troubleshooting and repairing BendixKing and Narco avionics. All work can be handled in-house at the Clear Sky Aviation facilities or on-location via his mobile instrument workshop, visiting airfields and customer hangars when needed.

Ross understands that many customers are on a budget and want to know the cost of services upfront as well as how long a test and inspection will take. Ross quotes a fixed flat fee to evaluate the performance and airworthiness of customers' radios and instruments. The fee varies by distance from his facilities.



ABOVE: Robert Ross, an avionics technician, A&P mechanic, electrical engineer and pilot, inspects a pitot-static system. Testing and inspecting the systems for customers' aircraft constitutes about 40 percent of his company's revenue. BELOW: A BendixKing KX 155 nav/comm is ready for testing on the Clear Sky Aviation test bench.

Ross posts his fees, the time required, and the regions where mobile service is available, as well as informational videos showing the instrument testing process online.

"I deduct the price of the initial evaluation from the price of the quoted maintenance, if the unit is serviceable," he said. "There is no guessing, no surprises for the customer."

If business continues to grow as expected, Ross hopes to hire an FAA-certified repairman next year. In the meantime, he's adding to his aviation credentials.

"Aviation has been a lifelong dream of mine and very high on my bucket list," Ross said. "I have earned a private pilot certificate and A&P ratings. I am now studying to become an FAA-certified advanced ground instructor. It is a privilege to work in the general aviation community every day." □

