

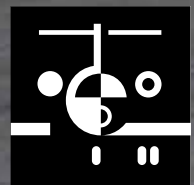
A publication of Duncan Aviation

Duncan Debrief

Spring 2021



DUNCAN
AVIATION



800.228.4277 | www.DuncanAviation.aero | +1 402.475.2611

If you're AOG, one call to +1 402.470.4560 will get you the support you need to get returned to service as quickly as possible. Learn more about our AOG Promise on page 19. Front Cover: RRT Airframe Tech Matthew Olson.



Trust, Value, and Comfort

Some of the best coffee I have ever had can be found at a little, locally-owned coffee shop on the way from my house to the office. For years, I have stopped there several times a week to grab a cup of coffee on my way to the airport. When the COVID-19 pandemic first hit Nebraska, I quit that habit. It didn't take long, though, before I realized that I needed that coffee. Not for its caffeine, but because my coffee routine provided comfort and normalcy in the rapidly changing environment of last spring. I found a way to safely work my coffee run back into my morning ritual.

Many of our customers have told us the same thing about their maintenance choices during the pandemic. They knew Duncan Aviation, trusted Duncan Aviation, and valued our work. So they found a way to ensure their aircraft could continue to be maintained by the crews at Duncan Aviation who were familiar with their aircraft and its history.

That lead me to wonder what exactly brings the most value to aircraft maintenance, modifications, and overhaul work in business aviation. Everyone talks about quality, downtime, schedule, and price, but beyond those obvious qualities, what do operators value in aircraft service? It might be relationships like the friendship between Kevin Jerram and Larry Papa shared on page 7, support in the field like our airframe RRT expansion covered on page 19, or longevity of products like the fabulous 13-year interior shared on page 21. Whatever it is, even if you find that value at a different MRO, we'd like to hear about it.

Please take a short industry survey on MRO service provider value <https://form.jotform.com/211014604436140>. The survey should take no more than 5 minutes of your time, and we will draw 10 winners from the survey submissions to receive their choice of Bose Sound Cancelling headphones or an RTIC Hard-Side Cooler (valued around \$200). We will share survey results in the next issue of the *Duncan Debrief* magazine.

Thank you in advance for participating. 📄



www.DuncanAviation.aero

Copyright 2021 by Duncan Aviation. Nothing shown may be reproduced in any form without obtaining the permission of the creators and any other person or company who may have copyright ownership.

subscriber services:
Direct all inquiries, address changes, subscription orders, etc., to:

Web: www.DuncanAviation.aero
E-mail: Debrief@DuncanAviation.com
Contact: Marketing Communications
Phone: 800.228.4277 or +1 402.475.2611

contributing writers:
Eric Anderson
Kate Dolan
Diane Heiserman
Lori Johnson

lead designer & photo director:
Kaela Paseka

graphic designer:
Joe Vavrina

video producer:
Jared Petr

web developer:
Tad Luedtke

circulation director & office administrator:
Brian Ryba

chief editor & manager:
Lori Johnson

president:
Jeff Lake

CEO:
Aaron Hilkemann

chairman:
Todd Duncan

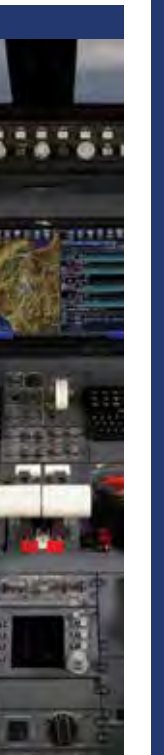
chairman emeritus:
Robert Duncan

company founder:
Donald Duncan (1922-1981)

Contents

MRO Service Provider Value Survey:

Aircraft Sales and Acquisitions Pivot To Continue Supporting Customers	Connectivity, Comfort, and Cabin Ambience	Benefits That Go Beyond A Free Dinner	Carrying A Theme Through A Fleet With A Few Unique Touches	Fly Connected: Go With Gogo AVANCE L5	Duncan Aviation Delivers Highly Customized Global Express XRS AOG Promise	GIV Interior Withstands Test Of Time	Duncan Aviation Backshops Take Center Stage	Now Available: Download and Analysis	When Customer Service Takes On New Meaning	Duncan Aviation Accessories—It's An Enterprise Operation	News & Tech Updates	
1	3	7	9	13	15	19	21	25	29	31	33	35



Aircraft Sales and Acquisitions Pivot to Continue Supporting Customers



Duncan Aviation was founded by Donald Duncan in 1956 as a Beechcraft distributor, and the sale and acquisition of business aircraft has been at the heart of the business since day one.

Coming off a strong fourth quarter in 2019, January and February 2020 started off with a high level of activity. Then COVID-19 came into the picture, stalling that momentum. Duncan Aviation banned all but essential travel in order to comply with World Health Organization guidelines. Worldwide restrictions, travel

bans, and uncertainty all contributed to the response by Duncan Aviation's Aircraft Sales and Acquisitions team who, backed by the knowledgeable and flexible resources throughout the Duncan Aviation enterprise, managed to continue to support clients.

Aircraft Relocation: International Response During A Pandemic

In the early days of the pandemic, an industry partner referred Tim Barber, a United Kingdom-

based member of Duncan Aviation's Aircraft Sales and Acquisitions team, to a client to represent the sale of a Global Express XRS. Tim strategized that relocating the aircraft from Farnborough in the United Kingdom to the United States would improve his chances of closing a sale since 90% of serious inquiries were coming from North American buyers.

The Global Express XRS was brought to market on March 24 and relocated to Duncan Aviation's Provo, Utah, facility on April 2 to make the aircraft more accessible. From the time the aircraft was brought to market, it sold in just 69 days. This was the fourth Global Express XRS to sell in 2020, with others taking an average of 254 days to sell; this was an incredible feat considering the aircraft's market entry was at the height of what aircraft sales experts have referred to as *The Great Pause*. The remarkable result was only achieved through a very cooperative client, an equally pragmatic buyer, and an incomparable team at Duncan Aviation.

Doing What It Takes

Typically, Aircraft Sales Rep Dave Coleman visually reviews each aircraft he represents or acquires for clients and analyzes their records in-person.

"When COVID-19 struck, this became far more difficult for me," Dave says. "It was a lot tougher to get photographers out to take photos of the aircraft due to safety concerns of flying on the airlines. However, business aviation comes in many forms."

As an active pilot and aircraft owner himself, Dave took to the air in a Beechcraft Bonanza to continue to offer the same level of service. He even photographed aircraft himself in order to support his clients at the level he preferred.

"The reduction in traffic was significant," Dave says. "Air Traffic Control provided a lot of direct routings and airspace clearances I had never received before. It was so quiet I had to check to see if Air Traffic Control was still there!"

Expert Resources

Duncan Aviation's Aircraft Sales and Acquisitions team is composed of aircraft sales experts, each with an average of 35 years of aviation experience. Backed by in-house flight operations staff and 2,400+ airframe, engine, and avionics technical specialists located around the world, our representatives have first-hand access to the aircraft marketplace unmatched by any other broker or acquisition organization.

Aircraft Sales Market Research Analyst Rebekah Williams says that due to sales reps being located around the globe and the rapid changes that occurred in 2020, it was more important than ever to stay connected.

"We decided to set up frequent Aircraft Sales Zoom calls as a way to collaborate with and support one another," Rebekah says. "We will jump on, provide an update, talk about what we are seeing in the marketplace, talk through uncertainties, and determine how to leverage our vast resources for the benefit of our clients. The many difficulties brought on by 2020 have empowered our team to be more connected, collaborative, and strategic than ever before."

A Year to Remember

Duncan Aviation successfully closed 35 transactions in 2020.

Aircraft Sales Director Steve Gade says, "The bottom line is transactions have gotten amazingly complex. Now more than ever, tribal knowledge and immediate access to trusted resources are critical to serving the best interests of buyers and sellers."

The years of experience of the sales reps, the expert resources backing them, and overall knowledge of the business aviation industry proved to be extremely beneficial to a successful year for the company and our clients. 📺



Case by Case

To learn more about the unique and personal ways that Duncan Aviation's Aircraft Sales and Acquisitions team supports its clients in the sale or acquisition of aircraft, read detailed case studies here: www.DuncanAviation.aero/resources/case-study.

View Aircraft for Sale Inventory:

www.DuncanAviation.aero/aircraftsales

CONNECTIVITY, COMFORT AND *Cabin Ambiance*



Duncan Aviation paint teams in both Battle Creek, Michigan, and Lincoln, Nebraska, had a hand in painting this Falcon 2000EX. Both owners understood what a quality paint job means to the longevity of an aircraft.



This Falcon 2000EX, newly imported from the Isle of Man, landed at Duncan Aviation in Lincoln, Nebraska, for a pre-purchase inspection that advanced to new PRIZM cabin lighting, Gogo AVANCE L5 connectivity, and a complete interior and paint refurbishment.

This is the third Falcon 2000EX for a charter operator from the Northeast who takes great pride in their fleet and had high expectations this Falcon, once delivered, would match the quality of the rest. They trusted Duncan Aviation to make it happen once again.

Being a charter company, a passenger's online user experience is paramount. A high priority was placed on improving the aircraft's cabin connectivity by installing the Gogo AVANCE L5 Wi-Fi system. This allows passengers to stream audio and video, send email, make phone calls, or send text messages with less latency. The system was installed using one of the nine STCs Duncan Aviation has developed for installation of the Gogo AVANCE L5 system.

The crew's situational safety and awareness was heightened with cockpit enhancements that included Synthetic Vision, Auto Descent Mode, XM Weather, Push to Load, and Faster Chart Loading, along with the addition of two new USB ports.

Passenger comfort is equally as important. The interior was given a contemporary look with new carpet, rebuilt and refurbished seats, window panels, headliners, six USB ports, veneered galley, and new opaque polycarbonate sliding galley tower doors.

The look was finished off with Duncan Aviation's custom-designed Falcon 2000 PSU panels. These panels provide smooth, modern lines eliminating the painted metal center section. They are lighter in weight and secured in place to prevent falling during flight or heavy turbulence.

With connectivity and comfort taken care of, creating the perfect ambience was next. The cabin was outfitted with PRIZM LED lighting. This was the first PRIZM light installation by Duncan Aviation using its ODA authority to perform MRA projects. The process couldn't have gone any smoother. This enhancement allows passengers to change the lighting to match their mood giving them full-color spectrum and six lighting options, all controlled through a mobile app and existing cabin switches. The unique positioning of the up and downwash bulbs behind the Duncan Aviation PSU panels provided a consistent wash of light with reduced shadows on the headliner and upper sidewalls.

Finally, the aircraft received new paint. The exterior paint is 100% Duncan Aviation quality and was accomplished at two of the company's MRO locations. Prior to the purchase, the previous owner took this Falcon 2000EX to Duncan Aviation in Battle Creek, Michigan, for a C inspection and received a Matterhorn White base paint. They knew they were going to sell the aircraft and went basic. This allowed the purchaser to have a fresh base canvas on which to add their own stripe design. 🛩️

100% DUNCAN AVIATION *quality*



The sophisticated interior design was brought together with a classic cross-hatch designed carpet in a rich, warm, grey and a cream silk accent. It harmonizes with the neutral tailored seats, window panel, and headliner. The Duncan Aviation-designed PSU panels impact the overall appearance, providing an updated and stylish look.



No matter the time of day, this Falcon 2000EX's PRIZM LED lighting offers six cabin lighting options controlled through an app on any mobile device, allowing passengers to have lighting that matches their moods.



What a difference. Updated lavatory vanity.



The difference is in the details...the Duncan Aviation details! Rolling the veneer over to the edge versus a heavy, hardwood perimeter on the table surface provides a subtle but effective treatment to modernize the feel and look of the cabin.



The galley features new opaque polycarbonate sliding galley tower doors and vinyl entry. Its clean, light counters and brushed-nickel plating contrasts the straight-grain veneer with matte finish. The veneer is applied horizontally for a modern look in a rich brown color that coordinates with the warm grey in the carpet and lower sidewalls.

Benefits That Go Beyond A Free Dinner



LARRY & KEVIN

OCTOBER 2020

Aircraft Maintenance Manager for Executive Jet Management Larry Papa from Melville, New York, on Long Island (left) and Solairus Aviation's Maintenance Supervisor Kevin Jerram from Vernon, New Jersey.

In 2019, two customers who just happened to be at Duncan Aviation's facility in Battle Creek, Michigan, met at a customer dinner. They became friends and remained in touch throughout the year. When it was time for the 2020 inspections on their respective aircraft, they realized they were once again scheduled for the same week.

"We provide the dinners as a means to get customers together away from the hangars, so they can grow their networks, of course, but also in the hope that they form friendships and have someone to talk with while they're in town for a couple of weeks or longer with their airplanes," says Battle Creek's Manager of Sales Phil Suglia.

Experience. Unlike Any Other

More than 25 years ago, Steve Gade, who is now the Director of Aircraft Sales, proposed weekly dinners for Duncan Aviation's customers in Lincoln, Nebraska, after reading that Vail, Colorado, had discovered skiers' responses to the question, "How was your ski trip?" encompassed their entire experience in the resort town, not just their time on the slopes. He wanted the dinners to make our customers' experiences at Duncan Aviation memorable, and when first established, it wasn't unusual for owners Robert and Karen Duncan to join the groups.

Over the years, the popular dinners transitioned to every other week and still offer customers a chance to interact with members of Duncan Aviation's Senior Management Team and other team members. They also provide customers an opportunity to build community among other customers who are also in town.

"It never fails as we go around the room and introduce ourselves customers find things they have in common with one another," says Steve. "One time, a customer, upon hearing another customer's name said, 'Hey! I remember borrowing a quart of oil from you in Russia!'"

The Intangible Benefits

When Solairus Aviation's Maintenance Supervisor Kevin Jerram from Vernon, New Jersey, decided to entrust the Falcon 900LX that he manages to Duncan Aviation for a C Check in October 2019, he also decided he'd go to the customer dinner held at 600 Place in Kalamazoo.

"The dinners are fairly common now in the industry. OEMs have them, and so do some of your competitors," says Kevin. "They are a great way to network and get to know other people in the industry. If you just sit in your hotel night after night,

you have no chance of learning something potentially useful about your airplane or the industry."

Aircraft Maintenance Manager for Executive Jet Management Larry Papa from Melville, New York, on Long Island, had not heard of the dinners and was happy Duncan Aviation's Customer Care Rep Stephanie Alexander told him about them.

"That first dinner was great because when I met Kevin, we realized we were both in Michigan for C Checks on our Falcon 900s, and we were both from the New York tri-state area," says Larry. "Even though we'd never met, we knew a lot of the same people in the industry."

Their Falcons had the same inspection intervals, and Kevin and Larry ended up sharing offices in the same area of the Battle Creek facility.

"We started comparing maintenance notes the very next day," says Kevin. "In aviation, there's an endless amount of information and knowledge, so it's helpful to make these connections, especially when you're away from home. Then when you're back at home, you have another expert resource to turn to when you have problems. Larry calls me with an issue he's having, or I call him. There've been times we've discussed discrepancies and figured out how to fix them."

Having the same model airplane gave them something to talk about initially, but the two also discovered they had quite a bit in common, and their friendship developed and continued after they'd returned to their respective companies.

"Often, when you work for big companies, you live in your own little bubble," says Kevin. "This past year, that's been especially true. But there's always something going on, and even as we perform the serious duties of keeping our aircraft safe, it's nice to have these dinners where we can get together with a friend and hang out."

The Lighter Side of Life

When Phil found out Kevin and Larry were both back in Battle Creek in October 2020, he and his girlfriend Allison invited them to dinner.

"I just loved it that they met at one of our dinners and became such good friends," says Phil. "At dinner, they finished one another's sentences, argued like an old married couple, and laughed like they'd known each other for years. It's exactly the kind of friendship we had hoped the customer dinners would foster."

In addition to comparing notes about the aircraft they manage, they've also discovered other things they have in common.

Kevin loves pesto, and he was amazed to find that Larry grows about 65 basil plants each summer. He starts the plants from seed indoors and transplants them outside when the temps are consistently warm enough.

"I was surprised when Larry sent me two jars of his delicious pesto for Christmas," says Kevin. "I grill out year 'round unless there's too much snow. I've been grilling fish and putting Larry's pesto on it. I also put it on a pasta and even smear a little on bread."

Larry discovered that Kevin also loves olives. On a weekend road trip to the Lake Michigan shore, Kevin insisted they stop at an olive store in South Haven.

"He loves stuffed olives, and now he has me hooked on garlic and jalapeno-stuffed olives," says Larry.

Kevin also showed Larry how much better cheese is with Triscuits® instead of soda crackers.

The Value of Networking

Larry and Kevin agree that the ability to network with people in the industry, and especially someone with the same aircraft, has been a benefit to them both.

"I'm a big proponent of forming relationships with vendors and cultivating relationships with other maintenance technicians in the corporate aviation industry," says Kevin. "At the end of the day, we're all one team. If there's a broken airplane, we all have the same goal: Let's get that airplane off the ground."

Larry agrees. Networking helped him make friends in the industry and engage in the casual work talk that leads to solutions to problems.

Both guys feel that they're more informed about the industry in general and their aircraft specifically by taking advantage of every opportunity to network, whether it's a conference like NBAA or a customer dinner at Duncan Aviation.

Additionally, Kevin and Larry are planning to take their Falcon 900s to Battle Creek for their 2021 inspections this October.

"We really believe these dinners are all part of the Duncan Aviation experience," says Steve. "Whether it's the greeting at the front desk, the friendly hellos in the hallways, the excellent products and services we deliver, or the dinners with members of Duncan Aviation's Management Team, people may not remember everything you said, but they'll definitely remember how you made them feel. We want them to feel like part of the Duncan Aviation family." 🍷

"It's exactly the kind of friendship we had hoped the customer dinners would foster."

Phil Suglia,
Manager of
Sales, BTL

CARRYING A THEME THROUGH A FLEET WITH A FEW **UNIQUE** TOUCHES



Duncan Aviation's full-service facility in Battle Creek, Michigan, recently upgraded a Gulfstream G550, one in a fleet of four aircraft, which includes a Learjet 45, Learjet 60, and Challenger 605. Duncan Aviation has done interior work and exterior paint on all four airplanes.

As the G550 is the owner's newest aircraft, he wanted the color schemes and designs to resemble those of his other aircraft.

"I just love working with this customer and helping make their vision come alive," says Lead Designer Emily

Krawczak. "Although we've used red and silver metallic colors on each of the aircraft, the designs for each aircraft's paint scheme are a little different."

Because the G550 is the owner's aircraft of choice for his commutes from Mexico to northern Africa to Spain and back, the entire aircraft was given an overhaul. In addition to paint, most of the interior was redone, including the galley, cabin, and aft lav.

"These customers paid a great deal of attention to the flight deck, which is a little unusual, but they wanted it to look like a

brand new aircraft inside and out, and no detail escaped their attention," says Emily. "We fixed areas with chipped paint—the cockpit pedestal, in particular. New seat covers and softgoods were updated throughout the cockpit, too."

AVIONICS UPGRADES

Senior Avionics Sales Rep Justin Vena worked with the customer on an array of options, completely customizing the Venue Cabin Management System, switches, monitors, and more.

"With multiple users and devices, our customers were not happy that the internet bogged down, so we installed a new Satcom Direct Gateway Iridium router in a SatcomDirect hub," says Justin. "The Multi-In, Multi-Out router talks to multiple devices and improves speed and overall connectivity experience."

In addition to installing a 22-inch monitor in the new custom credenza, we installed a 19-inch monitor in the forward bulkhead and a 22-inch monitor in the aft cabin



bulkhead. All were controlled by Venue touch-screen switches, and a custom-designed bump-out feature allowed the switches to be mounted in a 45-degree angle configuration instead of flush in the drinkrails.

“It’s a really cool feature that they just love,” says Justin. “I saw a picture in a cartoon of a mythic aircraft, and I showed it to Completions & Modifications Sales Rep Adam Bruce. We worked with Engineering and the Interior Cabinet Shop and were able to come up with a design that not only looks incredible but is one of the customer’s favorite physical features in the aircraft.”

We also installed an ACA (Aviation Clean Air) ionizer system.

“This customer absolutely wants continuous protection from harmful, airborne pathogens, especially as he travels all over the world,” says Justin.

COMPLETE INTERIOR RENOVATION

Throughout the cabin, there is very little that Duncan Aviation’s techs didn’t touch. The forward four seats that are usually part of the cabin were instead set aside as the crew rest area.

“It makes a lot of sense when you think about it,” says Emily. “The crew uses the forward lav and has their rest area right there, too, instead of walking the length of the plane, through the cabin, to get to the aft lav.”

The owner’s wife was involved with the designs, color schemes, and materials used. She really focused on the veneer selection and how that would affect the overall appearance.

“We put new veneer and countertops in the galley, and as the floor in the galley is a high-traffic area, we went with vinyl for the floor,” says Emily.

One of the more interesting aspects of the new interior was a heavy curtain that was moved forward to close off the cabin.

“The double-sided, sound-absorbent material they chose was gorgeous,” says Emily. “And although you’d think moving a curtain would be easy, it required engineering

because of the additional weight the curtain added and because moving the curtain necessitated that we reposition the oxygen boxes.”

The cabin also featured new ALI LED lights, carpet, window shades, seats, a credenza, and a divan.

“We modified the credenza to accommodate the pop-up monitor, and the seat design was similar to what we’d used in their other aircraft, but not exactly the same,” says Emily. “I’ve had the good fortune to work on all four of this customer’s aircraft. Each has touches that let you know they’re part of the same fleet, but they also have unique features that give them slightly different personalities.”



FLY CONNECTED:
GO WITH GOGO
Avance L5

One of the go-to, air-to-ground connectivity options Duncan Aviation recommends to its customers is the Gogo Business Aviation AVANCE L5 internet and Wi-Fi system. There is no longer a reason to feel a loss of productivity when systems like the Gogo AVANCE L5 offer reliable connections, speed, and ease-of-use. Conversely, if you're looking to escape the demands of the office for a few hours, the system is equally as dependable for connecting to a variety of entertainment sources.

For a limited time, Duncan Aviation is extending the 3-month IFE trial offered by Gogo for 12 months of free, unlimited access to Gogo Text and Talk and Gogo Vision subscriptions to operators who install the Gogo AVANCE L5 hardware that connects to the Gogo Biz 4G network at any of Duncan Aviation's full-service facilities or Satellites.

Gogo Text & Talk lets an aircraft's crew and passengers use their personal smartphones and devices to call and text in the air just as they do on the ground. Gogo Vision lets passengers use their own devices to enjoy blockbuster movies, hit television shows, popular

magazines, flight maps (which include an incredible 3D moving map), and more during their flights.

Whether the inflight connections are used for business or entertainment, the AVANCE L5 taps into a reliable, high-speed 4G network so passengers can remain engaged throughout the flight.

"We're excited to offer this extended trial period for the outstanding IFE products available on the Gogo AVANCE platform," says Modifications Sales Manager Nate Klenke. "Offering this extension is our way of showing appreciation to the owners and operators who continue to trust Duncan Aviation with their connectivity upgrades."

In 2017, Duncan Aviation's full-service facility in Battle Creek, Michigan, installed its first Gogo Business Aviation AVANCE L5 internet and Wi-Fi system. Since then, the Duncan Aviation Engineering & Certification team has completed 9 STCs (Supplemental Type Certificates), covering the equipment and antenna and the complete installation of the AVANCE L5 system into more than 30 aircraft makes and models. As of early April 2021, the Duncan Aviation

avionics install teams throughout the company have used those STCs to install the Gogo AVANCE L5 internet and Wi-Fi systems in 250 airplanes.

Duncan Aviation's STCs are available for numerous aircraft makes/models including the following:

- Citation 680
- Citation 750
- Global Express, XRS, 6000
- Global 5000
- Challenger CL-650, CL-605, CL-604, CL-601-3A and CL-601-3R
- Challenger 300, 350
- Gulfstream GIV, G300, G400
- Gulfstream GIV-X, G350, G450
- Falcon 900
- Falcon 900EX (EX, EASy, LX, DX)
- Falcon 2000
- Falcon 2000EX (EX, EASy, LX, DX, LXS, S)

Additionally, Duncan Aviation pursued and received approval from TCCA (Transport Canada Civil Aviation) and EASA (European Union Aviation Safety Agency) for all of its STCs for the AVANCE L5.

Duncan Aviation can install the Gogo AVANCE L5 system at its three main facilities (Battle Creek; Lincoln, Nebraska; and Provo, Utah) and at most of the company's Satellites. 

TERRESTRIAL
Connectivity
 OPTIONS ABOUND!


In June 2020, Duncan Aviation announced a cooperative venture with Gogo Business Aviation to provide new installation options for the Gogo AVANCE L3 and the Gogo AVANCE SCS (Smart Cabin System). Duncan Aviation's Engineering & Certification Services teams updated three existing STCs for the Gogo AVANCE L5 Wi-Fi system to cover the installation of the AVANCE L3 Wi-Fi system or a standalone SCS on the following aircraft:

- Gulfstream GIV and GIV-X
- Bombardier Challenger 300 and 350
- Bombardier Challenger CL-650, CL-605, CL-604, CL-601-3A and CL-601-3R

The amended STCs include the installation of the Single Air Card LRU (Line Replacement Unit) and mounting tray and cover all other existing architecture for the AVANCE L3, including the Wi-Fi and terrestrial modem (cellular) antennas. The amended STCs will also cover design changes for the installation of the Gogo AVANCE SCS.

AVANCE L3 has a lightweight, small form factor compared to other inflight connectivity systems with similar capabilities and is more affordable. AVANCE L3 allows users to customize their inflight experience based on their unique needs, and its software-based scalable capabilities make it an ideal option for smaller aircraft including turboprops and light jets.

Although Duncan Aviation is not extending the free, 3-month period for the Gogo Text & Talk and Gogo Vision with the AVANCE SCS or L3 Wi-Fi system, both subscription services are available.

AVANCE SCS is a highly integrated smart cabin system that gives passengers a single interface for whatever a user wants to do: browse the Internet, make and receive phone calls, access the CMS (Cabin Management System), or access moving maps, movies, TV, and news via Gogo Vision. Because it's compact and lightweight, SCS can be installed on virtually any sized business aircraft, including aircraft that fly outside the US because it works across ATG and satellite systems. 

Entertained?



www.DuncanAviation.aero/GogoL5



If you need a reminder of what flying is like when you don't have access to a decent Wi-Fi system supported by a reliable 4G network, watch this poor, hapless soul who is unable to appreciate the comfort of his long flight as he is overcome by boredom!

DUNCAN AVIATION DELIVERS HIGHLY CUSTOMIZED GLOBAL EXPRESS XRS



View the gallery, watch the hydrodipping video, listen to the podcast, and find out more about this Global Express XRS refurbishment here: www.DuncanAviation.aero/resources/global-express-xrs-refurbishment



NO STRANGER TO UNIQUE AIRCRAFT REFURBISHMENTS, A LONG-TIME DUNCAN AVIATION CUSTOMER WANTED HIS AIRCRAFT TO BE BOLD, MASCULINE, AND STRIKING, MUCH LIKE HIS CITATION X THAT WE REFURBISHED A FEW YEARS AGO. WHILE THE DESIGN MOTIF IS CONSISTENT WITH HIS OTHER AIRCRAFT, THIS GLOBAL EXPRESS XRS DEFINITELY STANDS OUT IN THE FLEET AND FEATURES THE OWNER'S AFFINITY FOR THE ARCTIC.

PAINT

Duncan Aviation Lead Designer Emily Krawczak says that she was given the direction of “arctic camo” for the paint scheme. Emily drew different designs and sent them to the owner for feedback until they landed on one that matched his vision.

“Despite regulations that stipulate how thick we can paint the layers on the exterior, we were able to achieve the layered fade and the aesthetic goals the customer wanted while staying within the requirements,” Emily says. “The careful planning of our paint experts made it all possible. The aircraft certainly commands attention, and is one of my favorite paint projects.”

Emily says that Paint Layout Specialist III Dustin Noaeill spent a great deal of time on this project, working until everything was perfect.

“Dustin went in knowing this project was going to be complex and difficult,” Emily says. “Oftentimes, he wouldn’t talk to us while he was in the midst of planning because he liked to stay completely focused while working through the many layout challenges of this intricate design. He made it look just like what was intended, and it is absolutely amazing!”

Flight Controls and Layout Team Leader Kevin McGowan said his team came up with a completion plan for this paint scheme months before the aircraft arrived, discussing what it would take to complete the work and what the steps in the process would look like. The paint team put in over 211 hours to layout the scheme, used seven rolls of transfer material and 13 rolls of paint mask to complete the aircraft’s exterior transformation.

Project Manager Branden Hunt says this is the most complicated paint design his team has completed so far.

“This was definitely a unique design,” Branden says. “Paint Team Leader Allen McCormick and his team did an amazing job on this project.”

INTERIOR

The contrasting light and dark colors of the exterior are consistent with the interior and share a common theme.

Completions and Modifications Sales Rep Adam Bruce says that this one-of-a-kind interior was highly customized to match the owner's tastes.

"We provided several renderings and modification options before finally settling on a workscope that pushed our teams and, in the end, showcases all of our skills as a completion shop," Adam says. "New techniques in hydrodipping and finish work lead the way on this job."

The owner came to the table with a good idea of what he wanted and really wanted to stick with an interior he'd seen elsewhere. The challenge was to bring the design to life while working with his budget and time limitations. The Duncan Aviation team touched everything in the interior except the countertops in the galley.

The fully custom carpet features a tone-on-tone pattern with a geometric design, and was based on the inspiration in the original image the owner provided. The team was able to put together samples from vendors based on the images and designs from Emily. The carpet captured exactly what the owner wanted.

Because carbon fiber is so expensive and difficult to work with, the owner opted for a hydrographic carbon fiber look on the credenza top, lower galley front, drink rails, and card tables.

Emily says that hydrodipping is great because it is cost-effective, can be completed in less time, and is fully customizable because there are no limitations.

The bulkheads were painted a high-gloss black, which Emily says is getting more popular.

"We've been coming out of a matte trend design," Emily says. The high-gloss piano black on this interior looks gorgeous."

We also changed the doors on the galley to a standard cabinet door, where when you push them, they open and slide in.

THE FINAL PRODUCT

The owner was extremely happy with how his aircraft turned out, as is the entire Duncan Aviation team.

"We started working on this project long before we even saw the aircraft," Emily says. "I'm just really happy with how everything turned out. The craftsmanship, amount of time, and the pride our interior and exterior teams put into their work really shows." 🌟

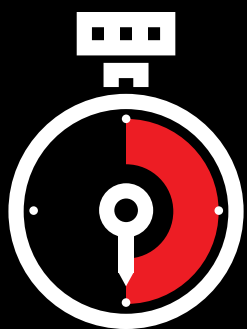


**THE SEATS FEATURE
A TWO-TONE RAISED
PATTERN AND
PIPING DETAIL.**

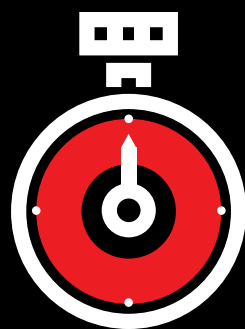


One Call. One Number +1 402.470.4560.

AOG Promise



Within 30 minutes, you will hear from a Duncan Aviation RRT member by phone to acknowledge your AOG request



Within one hour, we will follow up with labor availability and logistic planning



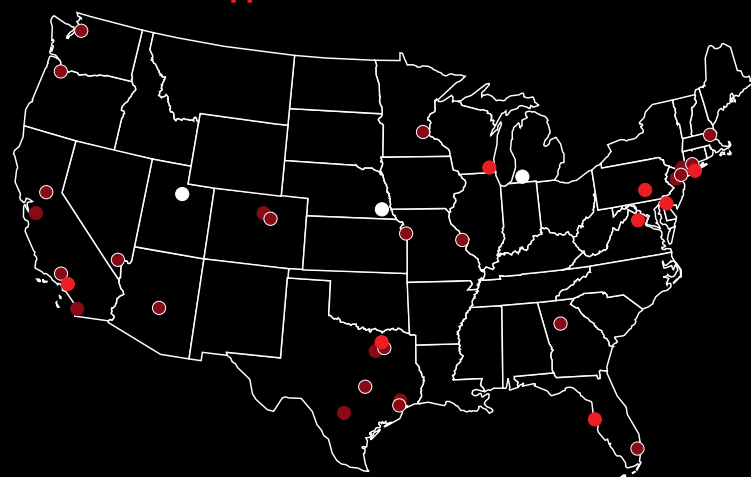
Within 24 hours, we will be on-site at your location, pending agreements and approvals



We promise to do what it takes to get you returned to service as quickly as possible

Duncan Aviation AOG Services Strategically Located Across the U.S.
www.DuncanAviation.aero/locations

- Full Service Locations
- Rapid Response Dispatch
- Satellites



A Promise in Action

No one likes to make an AOG call, but when it becomes necessary, the maintenance team at Shoreline Aviation calls Duncan Aviation when their aircraft are AOG away from home base.

Shoreline Aviation is an aircraft charter, sales, and management company with locations in Marshfield, Massachusetts; Bedford, Massachusetts; and Palm Beach, Florida. In late November 2020, a Falcon 2000LX had an issue in Palm Springs, California, just prior to taking off. After a short consultation with the OEM, a call was made to Duncan Aviation's AOG line giving details of the situation.

Fifteen minutes later, Cameron Arthur, a Duncan Aviation RRT Team Leader located at the Provo, Utah, MRO facility, was in touch with Shoreline's maintenance team.

Within 30 minutes, plans were made and work was authorized. Within hours, Cameron was en route to Palm Springs, landing around 11pm. He met the aircraft and crew first thing in the morning.

A quick inspection revealed the AOG required parts, engineering review, and NDT analysis. Through connections on and off the airfield, Cameron coordinated all necessary resources and had the aircraft returned to service quickly and efficiently.

Shoreline Vice President Ann Pollard said Cameron came prepared to get the job done, and his *can-do* attitude was reflected in his work. "He took immediate action by rallying the necessary support to get us back up and running as quickly as possible. He worked hard and didn't stop until the work was done."

Ann was not surprised, saying this is the typical Duncan Aviation work ethic she has come to expect.

"The Falcon 2000LX owner was appreciative of Cameron's quick response and dedication. As were we," Ann says. "He worked closely with our maintenance team and kept us informed with regular updates. Knowing that Duncan Aviation has our back, even when we are AOG in inconvenient locations, makes all the difference in the world. They have been a key part of our support network for more than 10 years. We have

done many projects in Lincoln and Battle Creek, and hope to visit their Provo facility in the near future."

A Promise Kept

Duncan Aviation's AOG promise is backed by more than 175 airframe, engine, and avionics technicians strategically located across the US. They arrive on location with fully equipped vehicles able to provide what is needed, when and where it's needed.

"Being able to stand behind this promise with confidence began when we changed the way our teams communicated with each other," says Kasey Harwick, Duncan Aviation's Vice President of Aircraft Services. "We developed an internal communications app that facilitates getting an AOG customer to the right team as quickly as possible."

A call received through Duncan Aviation's published AOG number is answered by a team trained to ask the right questions to identify the AOG issue, whether it is airframe, avionics, or engine related. This information is immediately routed through the app to the person on-call and nearest to the event, putting the right person in contact with the customer as quickly as possible.

When asked what AOG services are available through this mobile network, Kasey said it was difficult to quantify.

"Our airframe and engine RRTs and Satellite shops can handle many different types of squawks and services, planned and unplanned. However, when it comes to strict AOG events, we can be boots-on-the-ground troubleshooting the squawk while keeping in close contact with our main MRO facilities for tooling, GSE, and potentially additional support depending on the issue. We come prepared because it is our mission to ensure our customers don't miss theirs due to an AOG situation."

Kasey says the entire AOG team stands united to meet their customers' needs wherever they are and with whatever they need.

"It doesn't matter what the needs of our customers are," Kasey says. "When we get the call, we respond. We promise."

GIV INTERIOR WITHSTANDS TEST OF TIME

ONE of the biggest tests of quality is how long something lasts. Aircraft interiors are no different. Years of constant passenger use during flight wear on the functionality and aesthetics of any aircraft interior. With consistent usage, seats, tables, cabinetry, and galleys will show wear and tear, which affect the impression an aircraft makes on passengers.





PSU headrail inspired from Cartier Love bracelet.

Rounding off the plethora of innovations in the interior is a credenza that features a pop-up monitor that was ahead of its time as it was one of the first automated lifts to raise and lower the monitor from the credenza for viewing.



@DuncanAviation 2007



Courtesy of Dan Savinelli Photography 2020

On the lower side walls, stingray skins were used to further enhance the design. The stingray skin had to be sorted and cut to perfection using a high-pressure water cutter, creating a visually pleasing finish using a unique and natural product.



Courtesy of Dan Savinelli Photography 2020



The team also worked closely with the flight attendants to be sure items like silverware, snacks, and beverages were exactly where they needed to be in the reconfigured galley.



Courtesy of Dan Savinelli Photography 2020



The drink rails had a high-quality carbon fiber flat finish installed so the fiber pattern lined up perfectly along the entire drink rail. Paldao and wenge woods were the primary finishes used to complement the carbon fiber accents.

“Longevity of an aircraft interior is subjective; a lot depends on how often the airplane is used and how many passengers are regularly on board. In addition, the longevity is based on the quality of the products used coupled with quality of standards and processes used during the fabrication and installation. Of course, how well the interior is taken care of, cleaned, and maintained over time also plays into its lifespan,” says Duncan Aviation Aircraft Modifications Sales Manager Nate Klenke.

Signs of a quality refurbishment may not become apparent until several years after the work is done; it rests in the quality of the completion process itself and the durability of the products selected, most of which are not visible immediately after completion.

Case in point: Duncan Aviation completed a Gulfstream GIV in 2007 that was placed on static display at the National Business Aviation Association’s annual convention in Atlanta, Georgia. The aircraft had new paint as well as a fresh interior that showcased a number of innovative uses of materials and design elements, including carbon fiber accents, custom fabricated hardware, a mix of organic and recycled finishes, and a pop-up monitor. A look at that aircraft after 13 years of regular use proves that its design was timeless and the interior installation and construction was of the highest quality.


From the beginning, our design experts worked alongside Aviation Aesthetics’ owner and founder Havilande Whitcomb to turn the owner’s vision into a reality. The project was a success due to Duncan Aviation’s history of successfully collaborating with external designers.

13 YEARS LATER

Fast-forward to today. “The GIV interior and paint have held up incredibly well, much longer than typically seen in the industry,” Nate says.

“The aircraft featured a selection of high-quality materials that have held up due to excellent design and craftsmanship by Duncan Aviation,” agrees Havilande.

The GIV is managed by Volo Aviation and is available for charter through Solairus Aviation’s charter certificate. Volo Aviation Director of Maintenance and Chief Pilot Robert Tod says: “When I tell passengers that the paint and interior are 13 years old, they are usually stunned.”

Timeless design, high-quality materials, expert installation, and application of the interior components combined to allow this aircraft to surpass the test of time. 

DUNCAN AVIATION BACKSHOPS TAKE CENTER STAGE



“If you can’t do everything, I’m going somewhere else. Call me.”

It was a message Austin Chambers, Duncan Aviation Airframe Service Sales Rep based in Battle Creek, Michigan, received loud and clear.

This DOM had two weeks, a long list of known squawks that needed immediate attention, and no desire to have anything sent out to a third-party vendor. It was an all-or-nothing package that required a diverse set of specialized skills.

Unfazed, Austin went to work.

After a quick review of the list, he immediately identified all of the Duncan Aviation shops and backshops required to complete the work: structures, avionics install, avionics line, fuel, airframe, and landing gear.

Duncan Aviation’s long list of skilled backshops were not only capable of handling all the known squawks, but were prepared to handle any others that may be discovered along the way.

“Anytime you start looking behind access panels, under the carpet, or inside small spaces, is when the truth is uncovered,” says Austin. “The potential is high that we’ll uncover a few surprises like corrosion, fluid leaks, structural fatigue, to name a few.”

This is when Duncan Aviation’s backshops take center stage, and we are set even further apart from the competition.

The value of Duncan Aviation’s backshops is measured by more than dollars. They are invaluable in providing competitive quotes, aggressive downtimes, quality products, and customer support that keeps projects on schedule and continues long after the aircraft has left the hangar.

CONTROL OF THE SCHEDULE “Let’s figure out how to get this done.”

When an aircraft arrived needing five STCs (Supplemental Type Certificates), a lot was happening at once. To complicate things more, there was documentation that didn’t match what was on the airframe.

Duncan Aviation’s Alterations Planning Team stepped in to find a solution to safely return this aircraft to service with approved data for deviations.

Dennis Kruse, Avionics Service Sales Rep in Provo, Utah, says having teams like the APT makes his job a lot easier.

“The APT determines the correct scope of an avionics install project that involves making aircraft alterations,” explains Dennis. “They identify our available resources to perform the install, determine if it requires an STC, Major Repair Alteration (MRA), or

other RTS (Return to Service) paths. They know their stuff!”

Dennis presents these plans confidently to his customers, knowing the return-to-service path meets all milestones and requirements.

As much as the APT determines what path is taken during avionics projects, Duncan Aviation’s schedulers determine the when. These coordinated team members from the airframe, avionics, interior, and paint shops talk back and forth daily, discussing labor and shop availability. When they come back with a schedule and downtime, it is accurate. If they say it’s 5-weeks, then it’s 5 weeks.

CONTROL OF COSTS AND QUALITY

“I don’t know what I’ll get back until I get it back.”

Sending work to outside vendors can be stressful for customers and internal staff, says Angie Coleman, Completions and Modifications Service Sales Rep in Lincoln,

Nebraska. “When we send work to an outside vendor, we are sending Duncan Aviation’s reputation with it. We have to ensure our outside vendors are meeting the same Duncan Aviation quality we would if we did the work ourselves.”

Angie explains that maintaining Duncan Aviation’s reputation in the eyes of her customers is personal. “I take

great pride presenting the work our in-house back shops produce. They do great work. It’s personal to them, too.”

That’s not to say that every project goes as planned. But when issues arise, they are resolved quickly, and that’s impressive. “If a galley gets delivered to the aircraft for installation and it doesn’t fit, it is taken back to the shop and immediately fixed. There is no need to take additional

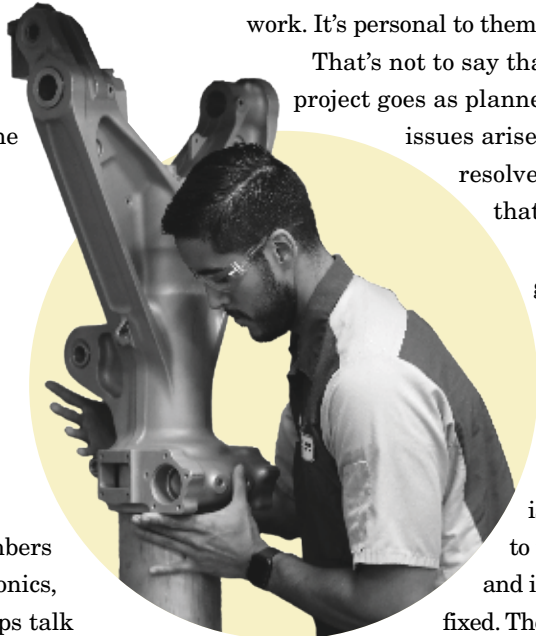
measurements, document what’s wrong, and ship the unit out for rework, all at the expense of the schedule and budget,” Angie says. “We have one of our master cabinet technicians come to the aircraft to see what needs adjusting. They then go back to the shop and get it done. We see the new unit back no later than the next day. This applies to nearly everything installed in the cabin, including carpet, stone floors, and countertops. Everything.”

Customers want to see options when selecting the materials and finish that will complete their interior refurbishment. The in-house design centers at all our MRO locations have a full library of material samples readily available. But when something different is called for, they aren’t afraid to tap into the skills of the interior backshop, Angie says. “Want to know what this pattern will look like when hydro-dipped? Let’s go find out.”

Knowing what the final product will look like takes the guesswork out of the process and puts everyone at ease.

CREATIVE SOLUTIONS

“There has to be a better solution.”



When the only options available are from an expensive outside resource with a long lead time, it doesn’t take long before Duncan Aviation technicians begin looking for better options. This innovative thinking has resulted in many creative solutions giving operators more choices for a lot less money.

Citation step treads were only available from the OEM with a long lead time and limited color selection.

Through Duncan Aviation’s ODA (Organization Designation Authorization), a new step tread was designed and given PMA (Parts Manufacturer Approval) in any color desired. The Fabrication shop precision-cut the tread using a Flow I 4800 Integrated Flying Bridge water jet cutting machine.

Customers like options and being involved. We invite all of our customers to walk through the decision-making process with the people working on their aircraft.

“They can watch their interior go through teardown, sit in the seats, test the comfort, and be involved,” explains Angie. “They appreciate being included at this level.”

RELATIONSHIPS

“I can’t do my job without them.”

That’s how vital Duncan Aviation’s backshops are to Jarek Jones, Project Manager in Battle Creek. “I may be orchestrating the big picture plan, but when I seek out the help of the Team Leaders, Coordinators, and Customer Account Reps in our backshops, they take ownership of their work and do what is necessary.”

After Jarek explains what he needs, they quickly accept his priorities and customers as their own.

“We are one company, no matter who is touching the aircraft. This machine doesn’t run itself; Duncan Aviation team members make it work,” he says.

BEYOND THE HANGAR

“It’s a daily relationship.”

Customer support doesn’t end when the aircraft leaves the hangar. Ed Reeve, Manager of the St. Louis Satellite, says the Satellites and Rapid Response teams are the faces of the company in the field. “We are on the front line with our customers every day, building relationships. We help to turn the first-time Duncan Aviation customer into a returning customer.”

Satellites and Rapid Response teams are located across the United States to fill the gaps of service for operators when in-the-field service is necessary.

“We’re a one-stop-shop with curbside service. We’re all striving for the same goal,” he says.

“I had no idea.”

This is a common sentiment expressed by nearly every first-time customer or prospect visiting a Duncan Aviation MRO location. They had no idea we are capable of all of these backshop services.

Take note: The list of support “behind the scenes” is deep and wide. And they’re all here to help the customer and meet project goals. 🛠️



DUNCAN AVIATION BACKSHOPS

- APT
- Autopilot/Flight Director Systems, Radar Systems, Nav/Com, ADF, FMS, DME, Transponders, ADI, HIS, Pitot Static, Gyros
- Burn Testing
- Cabinet, Finish, Interior Completions, Upholstery
- Calibrations
- Engine Line/Engine Test Cell
- Engine Shop/Line
- Engineering/Certifications/ODA
- Fabrications
- FBO
- Generators
- Hydraulic/Pneumatic/Electromechanical
- Hydrostatic
- Landing Gear/Wheels/Brakes
- Life Rafts/Batteries
- Machine Shop
- NDT
- Paint
- Rapid Response (airframe/engine)
- Rotable Sales
- Satellites
- Structures
- SWAT
- Tool Crib 🛠️



NOW AVAILABLE: FDR/CVR DOWNLOAD AND ANALYSIS



“OUR OBJECTIVE IS TO SUPPORT THE NEEDS OF OUR BUSINESS AND COMMERCIAL AVIATION CUSTOMERS BY TAKING ADVANTAGE OF THE AVIONICS COMPETENCIES THROUGHOUT OUR SATELLITE NETWORK.”

Business aircraft operators are required to perform regular data analysis of their FDRs (Flight Data Recorders) and CVRs (Cockpit Voice Recorders). To make this easier, Duncan Aviation recently collaborated with KGB Aviation Solutions to offer a new data analysis service. KGB Aviation Solutions developed DART (Data Acquisition Ruggedized Tool), which downloads data from most FDRs/CVRs. KGB Aviation analyzes the data and provides a comprehensive report showing the integrity of the parameters being recorded.

Using DART, Duncan Aviation provides the data download and report services to customers at its full-service facilities (Battle Creek, Michigan; Lincoln, Nebraska; and Provo, Utah) and at most of its Satellites.

“We believe that flight data and the integrity of that data is the next significant advancement in business aviation,” says Manager of Satellite Operations Matt Nelson. “Beyond complying with regulations and requirements from Safety Management Systems, insurance carriers and OEM service programs will require that the data from on-board systems is tested for the highest level of integrity.”

Vice President of KGB Aviation Kevin G. Balys agrees, adding that the relationship between the two

companies benefits aircraft operators by providing an efficient method of retrieving recorder data.

“KGB Aviation’s goals are to convert the data into engineering units, generate a list of recorded parameters for the customers, and provide a report clearly stating if the recording system meets requirements,” says Kevin.

CUSTOMER KUDOS

Avionics Team Leader Luke Bozetarnik at Duncan Aviation’s Satellite in Teterboro, New Jersey, has worked for years with customer Bill Dunne, a long-time Aircraft Maintenance Supervisor.

“Luke asked me why I specifically request KGB for work on my FDR or CVR, and my three-part answer is simple: Equipment, answers, and urgency,” says Bill. “We’ve always procured the necessary equipment, and whether the interrogation was routine or to troubleshoot, we accomplished the task on schedule. When we had questions regarding an FDR download, Kevin has shared his knowledge of how certain manufacturers accomplish individual recording parameters versus the FAA and EASA regulations.”

Taking advantage of KGB’s web portal, encrypted data automatically and securely transfers from the DART to KGB Aviation for analysis. Once analyzed,

Encrypted data automatically and securely transfers from the DART to KGB Aviation for analysis.

KGB Aviation sends the reports to the Duncan Aviation team to share with customers.

“I have never had to wait for results or answers,” says Bill. “I have no idea how KGB manages to process the amount of data they do and maintain such a positive customer experience, but I’m glad they do!”

BENEFITS OF THE ANALYSIS

Based on the results of the analysis, Duncan Aviation’s technicians can help troubleshoot and fix any of the anomalies identified. The reports provide insight into the integrity of the recording abilities of the FDRs and CVRs, and data is presented according to the rules the customer is flying under, such as FAR (Federal Aviation Regulation) 91 or 135, CAR (Canadian Aviation Regulation) 625, EASA (European Union Aviation Safety Agency), ICAO (International Civil Aviation Organization), and more.

“When I was an FAA inspector, I realized data reviews needed to be organized according to the rules the operator is flying under. Data is then converted into a comprehensive review of the recording system, spelling out deficiencies. We provide guidance on potential causes and remedies for the deficiencies based on our experience with the recorder and airframe,” says Kevin. 📧

EXPANDING SATELLITE SERVICES



In addition to the new FDR services, numerous Duncan Aviation Satellites now include main ship and emergency power battery capabilities.

“Our objective is to support the needs of our business and commercial aviation customers by taking advantage of the avionics competencies throughout our Satellite network,” says Matt.

Main ship battery maintenance capabilities exist now at the following Satellites:

- Atlanta, Georgia
- Bedford, Massachusetts
- Denver, Colorado
- Fort Worth, Texas
- Kansas City, Missouri
- Morristown, New Jersey
- St Paul, Minnesota 📧

WHEN CUSTOMER SERVICE TAKES ON NEW MEANING

2020 was a year that redefined businesses across the world, impacting most industries. Aviation was no exception. Flight hours dropped, sales declined, and rolling furloughs occurred for many companies, causing interruptions in service and breaks in the supply chain. Many companies did not survive and left customers scrambling to find new resources.



This past year brought to light how the aviation industry is changing. However, Jamie Blackman, Duncan Aviation's Rotable Manager, says the industry had begun to evolve more than three years ago.

"Admittedly, we were transactional then," she says. "Every time the phone rang, we'd answer and fill an order. When the phones began to slow down, we realized our customers were changing, and we needed to change with them."

Jamie and her team looked beyond their customers and transactions and examined their relationships and how they could make things even better, enabling them to improve their impact on each other, customers, and vendor partners.

This resulted in a more focused approach to providing a higher quality available inventory, with multiple solutions including price, condition, exchange, outright purchase, and warranty.

"We are a better resource because we are in continual communication with each other and our internal and external customers and sources. We are strategic in how we are building our inventories to get the best units in the hands of those who need them, when they need them," Jamie says.

For example, inventory made available through the customer consignment program goes through a more stringent review process before being approved for purchase. "We are more discerning with what we accept, taking a close look at the quality, demand, and condition of each part number including tag traceability," Jamie explains. Both internal and external customers have access to parts inventory through programs including customer consignment, Managed Rotable Inventory, and the Duncan Aviation owned rotatable pool.

"Our customers are diverse with unique parts needs," Jamie says. "They include FBOs, other parts brokers, and OEMs who all, in turn, have customers of their own to

support. Our tailored responses go beyond the transaction by asking questions to learn about their business, their customers, and find out how we can serve them better."

Duncan Aviation's Satellite network and in-house airframe and avionics maintenance teams also turn to Parts & Rotable Sales for required parts and services. "We can respond quickly to support our internal customers with immediate parts support. We work with these teams to make sure we have on-hand the most in-demand aircraft parts inventory."

These new strategies have proven themselves indispensable in the wake of the world's pandemic. Although Duncan Aviation's Parts & Rotables Sales were not immune to the sudden and unexpected changes brought on by COVID-19, they weathered the storm. 2020 ended up being one of their busiest and more successful years."

INTERNATIONAL PARTS SUPPORT

International Business Development Manager Shirley Crouch says nothing less than the highest customer service level is required, especially when working with a customer from another country.

"Since we are communicating with customers from around the world, we have stepped up our customer service game, offering many avenues to reach us," she says. Although email is their primary communication mode, customers can reach an International Sales Rep through real-time bold chat and parts locator services like ILS or Partsbase. "We are available when they need us, providing uninterrupted service."



During the pandemic, while many other vendors were closed and unavailable, new customers began to call. "They'd say, 'I can't get anyone to answer the phone at my normal vendor. So, we're giving Duncan Aviation a try.'" But they were wary, asking how the pandemic had impacted us and wanting reassurance that we would remain in business. Many of these new customers have since returned because they found consistency and trust with Duncan Aviation.

When the world gets back to normal, whatever that looks like, customers will remember who helped them with a highly personalized customer service experience, provided a speedy response, and resolved their inquiries 24 hours a day, 365 days a year. 🇺🇸

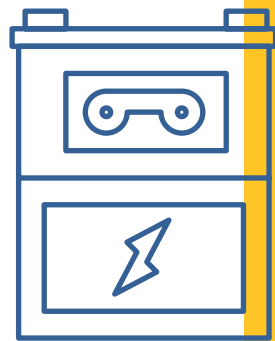
"Duncan Aviation, as a supplier to Raytheon Australia's Aircraft Operations, has always provided outstanding service. We depend on their expertise with sourcing components to service and maintain our aging fleet of Learjet 35A aircraft. Duncan Aviation's 24/7 parts service is always there when we need it, both for general service and AOG parts supply. The services offered range from major component overhaul to airframe/avionics components and down to the smallest breakdown spare. Duncan Aviation will, more often than not, be able to source with a minimum of time and fuss those parts that we require. We see Duncan Aviation as an integral partner in delivering essential services to our Australian Defense Customer."

*Tony Healey, EW and IFF Services Manager
Raytheon Australia, Joint Adversarial
Training & Testing Services 🇺🇸*



DUNCAN AVIATION ACCESSORIES—IT'S AN ENTERPRISE OPERATION

After the fanfare of celebrated expansions like opening a new MRO location, building additional maintenance hangars, or expanding authorizations, a second wave of quiet expansion occurs. Although it is not met with the same publicity, its presence is no less critical to every Duncan Aviation customer.



THE DEMAND FOR IN-HOUSE ACCESSORY SERVICES MULTIPLIES AS EXPANSIONS INCREASE THE AIRCRAFT ONSITE FOR MAINTENANCE. TONY CURTIS, DUNCAN AVIATION'S COMPONENT SERVICES ASSISTANT MANAGER, SAYS THIS IS AN EXCELLENT PROBLEM TO HAVE: "MORE AIRCRAFT IN THE HANGARS CREATES A GROWING NEED TO HAVE SKILLED ACCESSORY CAPABILITIES CLOSE BY."

As a company, we have invested heavily in supporting aircraft accessories, understanding full well the impact these units have on an aircraft's operation. All of our full-service MROs (Battle Creek, Michigan; Lincoln, Nebraska; and Provo, Utah) have onsite accessory shops with a long list



JARED BROWN
PVU BATTERY SHOP

of capabilities and authorizations from multiple component and equipment manufacturers.

The following areas have recently expanded.

Battery

In 2019, the Lincoln facility more than doubled its battery service space to nearly 1,400-square-feet, adding a new battery cooler, twice as much bench space, and advanced test sets including 2400w programmable DC electronic load banks, lead-acid analyzers, and main NiCad charger analyzers.

With the recent completion of the Battle Creek and Provo battery areas, all shops have every test set, battery charger, and capacity gauge available to perform capacity checks, testing, and maintenance for every aircraft battery in service on today's business aircraft, along with dedicated rooms for both lead-acid and NiCad battery services.

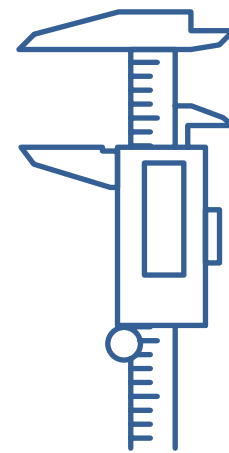


LARRY HICKMAN
BTL CAL LAB TECH

Calibrations

All of Duncan Aviation's calibrations laboratories offer calibrations traceable to the SI (International System of Units) through NIST (National Institute of Standards and Technology). And they use NIST traceable standards.

The Lincoln cal lab is accredited to ISO/IEC17025 (A2LA cert# 3908-01) and able to



calibrate a variety of equipment, including radio-frequency test sets, electrical tools, dimensional tools, thermodynamic, pressure gauges, torque wrenches, crimpers, and master hydrometers.

Battle Creek's cal lab is able to calibrate pressure gauges, crimpers, multimeters, torque wrenches, and thermodynamics. The lab supports measuring equipment owned by the company, employees, and on-site customers. It is also able to support customers at Kellogg Field and in the Battle Creek area.

The new lab in Provo began operations in the spring of 2021 with capabilities to calibrate torque wrenches, select digital multimeters, crimpers, and pressure gauges.



Landing Gear

All three MRO locations share in supporting landing gear. They overhaul, inspect, and repair gear on Beechcraft, Cessna, Embraer, Bombardier Learjet, Bombardier Challenger, and Bombardier Global landing gear. The Lincoln gear shop has the largest footprint and works larger gear sets like those from Global, Challenger, and Embraer aircraft. Smaller gear like Learjet, Beech, and Cessna Oleos are sent to Battle Creek and Provo.

Business is booming, and there is no sign of it slowing. The Lincoln gear shop went through an expansion in 2016 and is already near capacity. It more than doubled the average annual number of gear sets completed to 77 and is forecasting more than 100 by the end of 2021.

People

You cannot add capabilities without adding people to support them. In two years, the accessories team grew by more than 25

with technicians, customer account reps, rotatable managers, sales, and leadership.

Keye Kinnamon is the Sales & Service Representative dedicated to landing gear. He has taken the customer experience to the next level by keeping it real. "Customers appreciate direct communication, even when it isn't exactly what they want to hear. I manage their expectations by being open and honest. Trust is built in small interactions. It's not always a home run." His phone doesn't stop ringing.

Dustin Johnson, Components Shop Supervisor, oversees the day-to-day accessory operations enterprise-wide. He points to consistency as the reason his teams are successful.

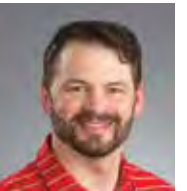
"We operate under the same playbook." When technicians are shuttled between locations as reinforcements during peak demand times, they hit the ground running without added training or oversight. They immediately step in, getting to work. When everyone is doing the same things, there is consistency in the service."

Tim Fidler is the Accessories Manager of Business Development and is on the front lines visiting customers in their hangars. He hears first-hand what they think, and they are not afraid to tell it like it is. "Our accessories reputation in the industry is of trust, quality service, and reliability," he says.

BUT HE GIVES CREDIT WHERE IT IS DUE. "OUR CUSTOMER ACCOUNT REPS DON'T GET ENOUGH RECOGNITION. THEY ARE CONSTANTLY ON THE PHONES, ANSWERING QUESTIONS, HANDLING COMPLAINTS, AND PROVIDING PROJECT UPDATES. THEY HANDLE IT WITH GRACE, BRIDGING THE GAP BETWEEN THE SHOP AND THE CUSTOMER. THEY ARE AMAZING UNDER PRESSURE," TIM SAYS.

The Duncan Aviation Accessories team is well aware of how their performance impacts the customer experience. They have a personal interest in doing what's necessary to deliver every time.

ACCOLADES ARE UNNECESSARY.



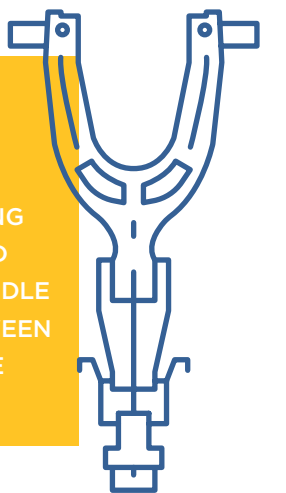
KEYE
KINNAMON

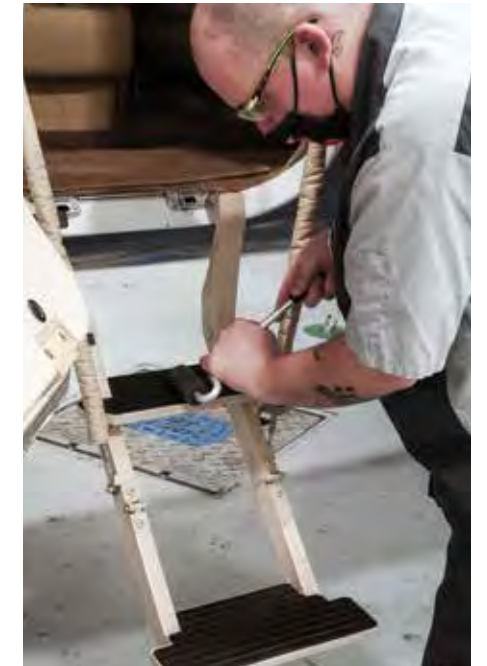


DUSTIN
JOHNSON



TIM
FIDLER





Newly Remodeled Design Center in Battle Creek, Michigan

SWAT Services Now in Provo, Utah

News & Tech Updates

Duncan Aviation strives to keep you up-to-date on the ever-changing aviation industry.

www.DuncanAviation.aero/news



Technical Education Center

New Powerplant Apprenticeship Program

The US Department of Labor has endorsed our new Powerplant Apprenticeship program, which joins our existing Airframe Apprenticeship program that was endorsed by the DOL in 2019. Through a combination of on-the-job experience, classroom training, hands-on lab work, and supplemental course materials, the engine apprentices gain the work experience and knowledge necessary to become the kinds of skilled engine technicians we employ. Once the techs have completed their apprenticeship, they will have the confidence, technical abilities, and troubleshooting skills to find lasting careers at Duncan Aviation. The first cohort for the Powerplant Apprenticeship program was drawn from the Engine Shops and Engine Overhaul areas of the business. In the future, the program will be open to team members throughout the company. As with our Airframe Apprenticeship program, the techs chosen for the program don't have to have any experience; the program will provide all of the training, classroom work, and job experience necessary to earn an A&P license. However, the technicians do need some mechanical aptitude, and they must be highly motivated because the demands of the Apprenticeship programs are rigorous: Apprentices work full-time, carry a full course load, and need to study on their own time. 🛩️

www.DuncanAviation.aero/careers

Battle Creek Design Center Update

Our Battle Creek, Michigan, facility unveiled a new Design Center late last year that provides 30% more space, a more efficient work area, and an inviting environment for customers as they spec out designs for their aircraft paint and interior modifications.

When you approach the entrance of the newly remodeled Design Center, you'll notice that it is fully covered by glass and features large, glass doors. After walking through those glass doors at the center, you'll see a new conference room and a sample library full of cabinets and counter top space to show customers material samples. The space then extends to include separate work stations for individual designers.

Our Design Team in Battle Creek has four designers and one multimedia Illustrator. We also have full design capabilities in Lincoln, Nebraska, and Provo, Utah. The team in Lincoln has five designers and one multimedia Illustrator, and Provo has one designer and currently utilizes multimedia illustrators along with other designers from the Lincoln and Battle Creek locations. 🛩️

View Galleries: www.DuncanAviation.aero/gallery

Provo Facility Adds SWAT Services

With this service expansion at our Provo, Utah, facility, all of our three full-service facilities now offer SWAT services. SWAT stands for:

- S—Survey aircraft interiors
- W—Write prompt quotes
- A—Artistically clean, touch-up, dye, correct
- T—Transform appearance and functionality

SWAT teams go through the aircraft and take care of the small items that are not part of the scheduled service. The reason is aesthetics; small things like touching up paint, spot-dyeing leather seats, and resewing curtain glides quickly give the interior a facelift and allow an aircraft's interior to leave looking significantly better than it did when it arrived, regardless of the workscope.

SWAT is also synonymous with preventative maintenance. Small improvements completed regularly can go a long way to help an aircraft hold value. 🛩️



Honeywell Primus Elite Advanced Features STC Complete



Duncan Aviation's Autopilot Bench

Burn Testing Lab Expanded

Our Engineering & Certification Services recently expanded the size of our Burn Lab, expanding its testing capabilities to include the NexGen or Sonic Burner test (also known as the FAR 25.853 (c) Fire-Blocking test). Performing these burn tests in-house means neither Duncan Aviation nor our customers will have to wait for results to ship from other test labs, nor will they be subject to another lab's scheduling priorities. Because the tests are done in-house, customers will get their test results directly from their Duncan Aviation project manager as part of their delivery package, providing a single point-of-contact for all flammability test data. 🛩️

Revised STCs for Honeywell FMS NZ 6.1.1 and FANS

Our Engineering & Certification Services has revised two STCs, one for the Honeywell FMS (Flight Management System) and the other for FANS (Future Air Navigation System). The revisions allow Challenger

601 (CL-601-3A/R variant) operators to upgrade their existing NZ-2010 FMS to version 6.1.1.

The upgrade to 6.1.1 software will take care of the FANS latency issue. The new software includes a message latency monitor to detect old CPDLC (Controller-Pilot Data Link Communication) messages that may no longer apply. 🛩️

STC Support for Honeywell PEAFF

We recently completed an STC amendment for the Honeywell Primus Elite in the Embraer Legacy 600 that provides the option for the PEAFF (Primus Elite Advanced Features).

The amendment to add the Advanced Features option to the Honeywell Primus Elite STC consists of upgrading the existing Honeywell IAC (Integrated Avionics Computer) and DU-875 displays to allow for SVS (Synthetic Vision System) functionality. On the PFD (Primary Flight Display), synthetic vision provides a 3-D color image of runways, terrain and obstacles, giving pilots a clear view of the virtual flight path. In



Rendering for Chantilly Air in Washington, DC

addition to SVS, this amendment upgrades existing functionality for METAR (Meteorological Terminal Aviation Routine Weather Report) and TAF (Terminal Aerodrome Forecasts) to the available XM Weather Display selections on Primus Elite's Enhanced Moving Map Display on the MFD (Multi Function Display). 🛩️

Components Sales and Service Expansion for Honeywell Legacy Platforms

We recently entered into a new sales and repair services agreement with Honeywell Aerospace that enhances support for mutual customers and covers a wide range of business jets, turboprops, rotor-wing, and regional/commercial make/model aircraft.

Duncan Aviation now manages the sales, exchange, and repair services for specified Honeywell Avionics Content, Flight Controls, Electronic Flight Control Instruments, Air Data, and Attitude Heading Reference Units on Legacy Platforms.

As a licensed Honeywell Authorized Service Center and Channel Partner, this expanded service builds upon the existing Honeywell authorizations by adding more than 2,000 part numbers on nearly 100 fixed and rotor-wing aircraft platforms.

On February 1, Duncan Aviation's Parts & Rotables sales team took over managing the parts sales transactions for this new Honeywell inventory, including AOG. We increased available customer support by adding six additional parts sales and customer account reps who are online and available 24/7/365 to serve customers, both domestic and international.



Houston Satellite relocates to Wilson Air Center's new hangar.

To house the more than 2,500 Honeywell legacy units, we also built a new parts warehouse with over 1,700 square feet.

Investment continues with 50 additional test sets, 12 new avionics repair benches, factory training for eight technicians with more onsite training performed at the Duncan Aviation Avionics Instruments Repair facility in Lincoln. Duncan Aviation anticipates the need to hire up to 12 new avionics technicians in the coming months.

Repair capabilities include avionics line maintenance on Honeywell units for customers at strategically placed regional repair shops across the country where select inventory is onsite for easy access. 🛩️

New Satellite in DC Area

Duncan Aviation recently opened a new Satellite Repair Station in the Washington, DC, area at Chantilly Air's newly completed Jet Center. The companies have been meeting the needs of business aviation customers for decades, and this latest endeavor will offer complementary services to maintenance and avionics customers in and around the Manassas Regional Airport (HEF) in Northern Virginia. 🛩️

Houston Satellite Relocates

Our Satellite in Houston moved into a newly constructed, state-of-the-art hangar at Wilson Air Center at the William P. Hobby International Airport. This new hangar gives our Houston team three times the space and twice the hangar door height as our previous space, allowing us to work on everything up to a Gulfstream G650 in our hangar there now.

The new address is: Duncan Aviation, Inc., 9011 Randolph Street, Suite B, Houston, Texas 77061. The main phone number remains the same: +1 713.644.0352. 🛩️

View available STCs: www.DuncanAviation.aero/services/engineering/stc-library

View Locations: www.DuncanAviation.aero/locations



Brent Hudecek



Cobi Lane



Greg Gaden



Jason Thuman



Matt McGinn



Steve Ward



Susie Corn



Troy Nail

Right: Duncan Aviation's avionics teams are installing the Collins Aerospace Pro Line Fusion in a Challenger 604 at the company's full-service facility in Battle Creek, Michigan.

Far right: King Air 350 Garmin G1000 NXi Installation



Duncan Aviation People on the Move

Brent Hudecek recently joined our Avionics Sales team in Lincoln. Brent has worked on business aircraft avionics for the last 30 years and has more than 20 years of direct experience selling avionics equipment.

Cobi Lane was hired as our new Director of Production Operations in Provo, where he is responsible for leading the Airframe, Engine and Modifications production areas. Cobi brings a wealth of knowledge and experience, having worked as a Tech 2 Mechanic, Senior Tech, Mechanical Team Leader, Shift Leader, Service Team Manager, Operations Manager, and Director of Customer Service with Gulfstream over the last 21 years.

Greg Gaden recently joined our Rapid Response team and is located in northern California. Greg's engine knowledge and experience span more than 30 years on engine platforms including Honeywell (AS907/TFE731), Rolls Royce, and Pratt & Whitney. To schedule mobile engine services in Oakland, California, and the surrounding areas, Greg can be reached at +1 562.505.7671.

Jason Thuman is now the Manager of our Satellite Shop in Kansas City, Missouri. In addition to 14 years of experience performing avionics installations with Duncan Aviation, Thuman has an Associates in Applied Science and Advanced Electronics and Avionics from Westwood College in Broomfield, Colorado, and a Bachelor's Degree in Business Management and Leadership. Before starting work on his Master's Degree in Organizational Leadership in July 2021, Thuman plans to take his oral and practical exams for his Airframe and Powerplant (A&P) license.

Matt McGinn was named a Bombardier Service Sales Representative where he assists Bombardier operators

in planning for maintenance events. He brings years of experience with Bombardier aircraft and was hired with Duncan Aviation in 2014 as an airframe technician.

Steve Ward was named Manager of our Satellite Shop in Dallas and the Avionics Repair Station in Fort Worth, Texas. Ward was hired to work at the Dallas Satellite Shop 22 years ago, and he has more than 35 years in the aviation industry. Located on Dallas' Love Airfield, the Dallas Satellite is the oldest of our Satellites.

Susie Corn is now our Regional Sales Manager for the South Central United States, which includes Arkansas, Louisiana, New Mexico, Oklahoma, and Texas. Susie joined Duncan Aviation three years ago as a Senior Sales Representative for Engine Sales & Services. Combined with her previous years of aviation experience, Corn brings more than 20 years of aircraft knowledge and experience to her new position.

Troy Nail was named Airframe Service Sales Manager where he manages the airframe service sales team for our Lincoln and Provo facilities. Troy joined Duncan Aviation's airframe maintenance team 19 years ago and moved to Airframe Sales five years ago.

Challenger 604 Pro Line Fusion Retrofit

Our Battle Creek avionics teams are installing the Collins Aerospace Pro Line Fusion in a Challenger 604. This scalable, fully connected, integrated avionics system with advanced situational awareness and intuitive decision-making tools also features touch-control primary flight displays, heads-up vision systems, and weather-threat detection systems, all of which help pilots fly with greater precision.

We have installed Collins Pro Line Fusion in Citation CJ3s since 2016, and we've installed dozens of them. We're now able to offer this powerful suite to our Challenger 604 customers as well. This gives customers with CL-600-2B16 variants the option to visit any of our MRO facilities or Satellites for this installation.

ACA Ionizer Packages for Globals and Challengers

Duncan Aviation has created an installation package for the Aviation Clean Air (ACA) ionization system for Bombardier Global and Challenger 300 and 350 aircraft. The packages include everything necessary for installing the ACA Ionizer system, including the STC (Supplemental Type Certificate), the ionizers, and PMA (Parts Manufacturer Approval) parts kits.

Duncan Aviation will also perform the necessary modification of the air ducts for the installation, which can be completed at any of our three MRO facilities or many of our Satellites located throughout the United States.

Designed to be installed in an aircraft's existing environmental control system, the ACA ionizers operate in the aircraft's ductwork. The ionized hydrogen molecules neutralize pathogens and remove allergens and unpleasant odors, including those from pets, cigarette and cigar smoke, engine exhaust, cooking, lavatories, and VOCs (volatile organic compounds). The system has been tested and proven to actively kill the coronavirus that causes COVID-19 and other pathogens.

King Air 350 Garmin G1000 NXi Installation

Our Satellite in Houston, Texas, recently completed installation of the Garmin G1000 NXi retrofit in a King Air 350. The new flight deck incorporates two large 10.4-inch primary flight displays with synthetic vision and a 15-inch multifunction display that includes digital engine gauges, moving map, traffic, weather and other important flight-related data. The Garmin G1000 NXi exceeds the required FAA initiatives for ADS-B (Automatic Dependent Surveillance-Broadcast) and enables WAAS LPV (Wide Area Augmentation System Localizer Performance with Vertical guidance) approaches at most business aviation airports in the United States.



ACA Ionizer Installation Parts Kit

Our people have a passion for aviation and for serving customers.

Garmin G1000 NXi Installation: www.DuncanAviation.aero/G1000