

A publication of Duncan Aviation

Duncan Debrief

Spring 2018



www.DuncanAviation.aero
Spring 2018
Duncan Debrief, a
customer magazine.

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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:

Kate Dolan
Diane Heiserman
Lori Johnson

lead designer & photo director:
Kaela Paseka

video producer:
Jared Petr

web developer:
Tad Luedtke

circulation director &
office administrator:
Brian Ryba

chief editor & manager:
Lori Johnson

vp marketing:
Steve Gade

president:
Aaron Hilkemann

chairman:
Todd Duncan

chairman emeritus:
Robert Duncan

company founder:
Donald Duncan (1922-1981)

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Todd Duncan

CHAIRMAN

Ethics and Integrity are
Duncan Aviation Cornerstones

As a young boy, I can remember attending business meetings with my grandfather, Duncan Aviation founder Donald Duncan. He would often end those meetings with a promise and a handshake. And everyone in the industry knew that would be enough; Grandpa Donald was true to his word.

Over the years, we have built a culture of ethical behavior and integrity at Duncan Aviation. In today's complicated world, ensuring that ethics and integrity are properly applied to real-world situations can be a bit trickier. I, however, believe they are even more important now.


Business aviation companies should set ethical expectations for team members regarding conflict of interest, code of conduct, confidentiality, discretion, intellectual property, and proprietary information, just to name a few. Then the company leadership at all levels must demonstrate and model those ethics in their everyday business interactions and transactions.

The NBAA (National Business Aviation Association) recently took an industry lead on this issue by releasing a formal, two-page statement called, "Ethical Business Aviation Transactions." The statement is designed to serve as a resource for ethical best practices for business aviation transactions and addresses honest and ethical conduct, identifies where conflicts of interest may arise, and ensures compliance with state, federal, and international law.

Duncan Aviation's senior management team fully endorses the NBAA statement and has committed to encourage others to embrace it and raise the bar on industry professionalism.

Duncan Aviation has long asked team members to agree to a strict Code of Conduct. This is because we believe our most valuable and fundamental asset is our reputation, which depends on the integrity and judgment of each of our team members. The essential message underlying the Code is that no one should ever sacrifice his or her integrity, whether for personal gain or a perceived benefit to Duncan Aviation's business.

We understand that a Code of Conduct cannot possibly anticipate every situation. The bottom line is that Duncan Aviation relies on each employee's sense of personal integrity to protect and promote the reputation of Duncan Aviation. We believe that the individual ethical conduct and judgment of our team members is fundamental to who we are.

Likewise, NBAA's statement will help strengthen our industry by promoting a positive image within the community and among the public at large that will allow business aviation to continue to succeed and grow. 



< CHRIS ULRICH IN THE STATE-OF-THE-ART CONTROL ROOM



DUNCAN AVIATION ENGINE SERVICES ARE TAKING OFF

Investing Today For Growth Tomorrow

Duncan Aviation's Turbine Engine Services has had a busy couple of years. Our Honeywell engine service authorizations have expanded to now include Honeywell AS907 (HTF 7000) Series Minor and Honeywell TFE731 Heavy service designations for the Lincoln, Nebraska, facility.

Ever since, Duncan Aviation has invested in new tooling, training, and team members not just to meet immediate demands, but with an eye to the future.

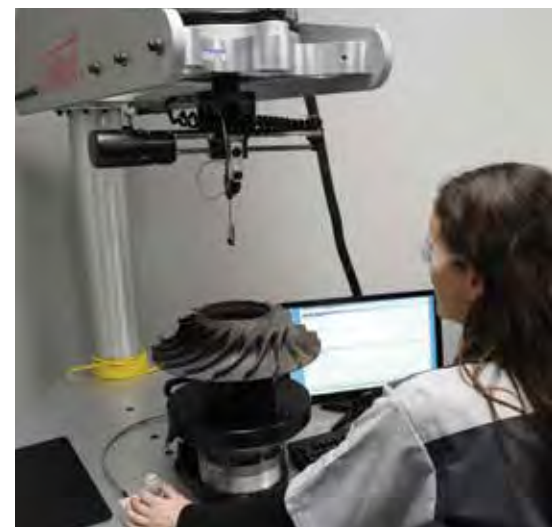
TEST CELL

The most noticeable part of the shop expansion is the addition of the 20,000-lb., thrust-class turbofan engine test cell and state-of-the-art control room. Our new test cell is the only one with Atec's latest ADAQ™ Data Acquisition and Control System. It is a fully scalable data system that can be customized to multiple engine platforms and provides intermediate-level, depot-level, production-level, and development-level engine testing capability. From computer hardware, displays, and touchscreens to the data acquisition and PLC control hardware, all run on the latest technology.

Chris Ulrich, Tech 3, has invested time working with Honeywell on TFE731 test cell operations.

CONTROL ROOM

Juan Fuentes, Atec Electrical Engineer, says the ADAQ 4.0 system is better suited to collect, display, and record quality measurement data. "With a distributed system, we are now able to place measurement equipment much closer to the point of measurement, allowing for a much more responsive and accurate measurement. ADAQ 4.0 was designed to be a highly configurable, more modular system while still encompassing all the features customers like and depend on to safely and accurately test and certify aerospace engines.





< **TWO-TON CAPACITY OVERHEAD CRANE ALLOWS EASY LIFTING AND PRECISE PLACEMENT**

THE ROCK, A 48X96X10, SOLID PIECE OF GRANITE >



< ETC-2000 JET ENGINE EDDY CURRENT SCANNING SYSTEM

It's incredibly important to provide a system that can measure and record accurately and precisely."

OVERHEAD CRANE

Optimizing productivity, safety, and space, nearly half of the shop is covered by an overhead crane system to allow for easy lifting and precise placement of engine parts during assembly and disassembly. Each engine hoist has a two-ton capacity.

NDT

Duncan Aviation NDT services received Honeywell authorization to perform the required eddy current inspection of the HPC impeller as part of our TFE731 Heavy Maintenance Authorization. With the addition of a new ETC-2000 Jet Engine Eddy Current Scanning System, training, tooling, probes, and reference standards, these new capabilities allow for future growth into GE and Pratt & Whitney engine inspections in addition to the work currently being done on the Honeywell TFE731 engine.

TOOLING

A new surface plate, affectionately nicknamed "The Rock" because it is a 48x96x10-inch, solid piece of granite, is milled to an accuracy of +/-0.0005 of an inch for precise measurements of subassemblies. The Rock is part of the nearly \$1 million in specialized tooling that Duncan Aviation has invested in to support our new Heavy maintenance authorization for the TFE731 engine.

PLANS FOR THE FUTURE

If James Prater, Turbine Engine Services Manager, has anything to say about it, the Duncan Aviation engine program is not finished growing. "Throughout the entire expansion project, we have been looking beyond our immediate needs. The decision process for each step of the expansion, and for each equipment purchase, has been examined to ensure that we are in a better position to expand more easily into larger, higher-thrust engine platforms in the future."

WWW.DUNCAVIAATION.AERO/ENGINE >



AVIONICS UPDATE

What's New & What's Hot

When it comes to cabin and flight deck avionics in business aircraft, things are always changing. Innovation and operator trends affect the market and identify some technology operators might want to consider for their aircraft.



Connectivity

By April 2018, Duncan Aviation's avionics teams and Engineering and Certification experts had completed numerous STCs (Supplemental Type Certificates) and have several more in work for the Gogo Business Aviation AVANCE L5 Wi-Fi system for the following aircraft:

- Gulfstream GIV (G300, G400)
- Gulfstream GIV-X (G350, G450)
- Gulfstream V
- Gulfstream V-SP (G500, G550)
- Falcon 2000
- Falcon 2000 EX (EASy, DX, LX, LX5, S)
- Falcon 900
- Falcon 900EX (EASy, LX, DX)
- Challenger 300/350
- Challenger 605 (601-3A, 601-3R, 604, 605, 650)
- Global Express (XRS, 6000)
- Global 5000

These STCs are all for full equipment installation and approval of the WLAN (Wireless Local Area Network), allowing passengers to take advantage of connectivity speeds on Gogo Biz's new 4G network and have a system that will grow with their aircraft in the future. This ATG (air-to-ground) network has been connecting thousands of business aviation customers for years.

For every STC Duncan Aviation has developed, we have also applied for Transport Canada approval.

Currently, the only 4G ATG network for aviation is the Gogo Biz network, and it's available to aircraft flying above 10,000 feet. Start-up SmartSky received approval for its 4G network and PMA (Parts Manufacturer Approval) authorization. SmartSky intends to deploy its new 4G network throughout 2018.

Gogo recently introduced its AVANCE L3 product line for turboprops to mid-sized jets. AVANCE L3 equipment uses the Gogo Biz 3G network throughout the continental United States, including Alaska, and into parts of Canada.

The Gogo and SmartSky 4G ATG networks are strictly terrestrial-based for North America, so for global travel look to a satellite-based system. KU- and KA-based systems, like Honeywell's JetWave, feature nearly worldwide, high-speed internet connectivity. Gogo recently announced plans for its own second-generation KU network, so look for more information about that later in 2018.

Entertainment

For business travelers who want a top-of-the-line, scalable CMS (Cabin Management Systems) featuring high-definition audio/video, an HD moving map system, AVOD (Audio Video On Demand), and wireless cabin control with touchscreen switching, the two most popular systems are the Rockwell Collins Venue and the Honeywell Ovation Select.

A good time to upgrade to a high-capability CMS is during a major event such as an inspection or an interior refurbishment.

Often the driving force behind a CMS upgrade is the obsolescence of older CMS components. This

"Aircraft with fluorescent or early generation LED cabin lighting are facing obsolescence issues, and there is a demand for color-changing, mood lighting."

- Avionics Sales Rep Steve Elofson

www.DuncanAviation.aero/avionics


is especially true of older push-button switches, standard definition LCDs, and DVD players.

"One trend we're seeing in smaller-cabin aircraft is to remove the old CMS and make it cabin-management only, no entertainment components," says Avionics Sales Rep Steve Elofson. "Times have changed, and passengers often prefer to bring their entertainment content with them on their tablets and smartphones. There are a number of companies that offer lower-cost CMSes that feature new and supported switching for shades, lighting, and temperature control but no entertainment components."

Vendors are transitioning from manual updates for navigation databases and electronic charts to on-the-fly upgrades performed via an internet or cellular connection. Similarly, content providers for in-cabin entertainment, such as movies and TV shows, now offer a selection of movies on media servers, and with newer servers, the content updates automatically each month via a wireless internet connection in the hangar, eliminating the hassle of manually loading and managing current content.

LED Lighting

The hottest trend in LED lighting is replacing mono-colored interior lighting with newer LEDs that are available in the full-color spectrum.

"The latest generation of LED interior lighting is available now, and they continue to be a popular upgrade," says Avionics Sales Rep Steve Elofson. "Aircraft with fluorescent or early generation LED cabin lighting are facing obsolescence issues, and there is a demand for color-changing, mood lighting. Pricing has come down recently, so this is a relatively inexpensive way to update the cabin with the latest in lighting technology." 



Improving Work Is A Constant Process

"The best part of my role is watching team members learn from one another and build stronger relationships in the process," says Business Process Manager Erin Hart. "It's inspiring to see team members and entire shops discover new ways to improve their processes, eliminate wasteful motions, and proudly share their successes with others."



Business Process Manager Erin Hart recently celebrated her 10-year anniversary at Duncan Aviation at the Lincoln, Nebraska, facility. Starting as an Apprentice in 2007, she has worked in several departments and learned the aviation business from a variety of perspectives: Quality Audit, Customer Service, Marketing, and Government Projects. While working in Customer Service, Erin had her first contact with Duncan Aviation's customers, and she was able to connect how all of the regulations

Russell Vanek



and policies she'd learned affect them. In 2012, while working in the Marketing Department, Erin was asked to join the relatively new LEAN team.

"Although many companies in the aviation industry have LEAN programs, we've modified ours to target areas that will be most beneficial to our customers and fellow team members," says Erin. "At Duncan Aviation, LEAN stands for Listen/Engage/Advance/iNnovate."

Former Business Process Manager Ted Roethlisberger was hired in 2008 to head the LEAN Team in Battle Creek, Michigan.

"I was hired to build a culture of continuous improvement at Duncan Aviation," Ted says. "As a result, we have adopted lean methodology throughout our continuous improvement journey."

Gathering Ideas

The LEAN team, working with Duncan Aviation's IT Department, created a CIP (Continuous Improvement Program) database to which every team member at Duncan Aviation has access. Ideas come from throughout the company. Some are easy to resolve and implement; others require cross-departmental teams to assess and test.

Team members who submit CIP ideas are encouraged to problem solve, as well. They submit the challenge they are facing and their

idea to improve it, and they tell how the change will benefit them, their team, and our customers.

Through the CIP database, the LEAN team sees all of the ideas. They research them, respond to the team members who've submitted ideas, and see how implementing the ideas would help customers or team members directly or indirectly.

"It just makes sense to listen to our team members," says Erin. "They are best suited to improve their processes because they know their systems, and they have the ability to identify areas where there's duplication or waste or where we can better serve customers."

Ideas Run The Gamut

One of the ideas submitted by Battle Creek's Return Goods Administrator Liz McBride was to make Project Managers' contact information available at the Flight Desk so customers can notify them immediately upon landing.

After assessing costs and time, Duncan Aviation bought a business card holder and installed it in May 2017.

Several team members have suggested that we buy avionics



equipment, test it, and store it to save time and money for our customers. Avionics Master Tech Chad Ladwig in Lincoln made a similar suggestion and dropped costs by more than \$700 per unit.

Some of the ideas submitted save team members a great deal of time, which ultimately saves labor costs for customers. For instance, Paint Master Specialist Russell Vanek lamented the fact that priming a large aircraft required at least two team members to mix the primer in numerous 5-gallon buckets. It took quite a bit of time and acetone at the end of each day to clean all of those buckets.

He proposed building a stand to hold a 55-gallon drum where the primer could be mixed by one team member. He installed a valve in the bottom of the drum and, using a large mixer,

mixed up the primer. Because mixing the primer requires only one team member now, and there's only one 5-gallon bucket to clean at the end of the day, Russell saved the company and its customers labor time and money because it takes far less acetone to clean one bucket as opposed

to at least a half dozen of them.

Erin says: "Giving the team members, who do the work every day, the authority and responsibility to improve their work processes and environment is exciting to be a part of."

Chad Ladwig



It's More Than Numbers

Advice for Operators As They Compare MRO Quotes



When comparing maintenance quotes from different MRO (maintenance, repair, and overhaul) facilities, there are a staggering number of variables to consider. We sometimes hear from operators who choose the lowest quote and go elsewhere, only to discover their project's out-the-door costs far exceeded their other quotes. That is why looking at the numbers on each proposal and not verifying the details of what is quoted often leads to items being missed or added to the invoice after the aircraft is input.

Operators should go to great lengths to ensure they are as informed as possible about what is being quoted and how potential findings could affect the quoted work. They should know exactly what is included in their quotes in order to have an accurate budget number prior to input.

What Does The Quote Include?

To help make this process easier, we have compiled a list of questions and discussion points to help you get the details behind the numbers. This is not an all-inclusive list, but it is a great place to begin.

The best advice Brad Lennemann, Airframe Service Sales Rep for Duncan Aviation, offers those who need to compare proposals is to ask questions and not

assume the bottom line includes everything. "When it comes to comparing quotes, you should be more concerned about what is not listed than what is. If you don't see a line item for interior R&R or consumables or freight charges, for instance, ask if they are included."

Here are some things to begin the proposal conversation.

Airframe

- Is the interior R&R included? This is often required to gain access below the cabin floor.
- What about paint touch-up? And if so, is touch-up completed by spray or brush?
- Are there state taxes on parts and labor? Consumables and freight charges? Are they included?
- Are support services like NDT, machining services, hydrostatic testing, included?
- And what about tool rental? Is it included or an additional charge?

Avionics

"An MRO doesn't like surprises any more than the customer does," says Dennis Kruse, Avionics Sales Rep. "It is important for the customer to spend time reviewing part numbers and prerequisites with the sales team to ensure an accurate proposal."





- Are engineering fees included?
- Are any additional mods required to complete the workscope, like relocating antennae?
- Does the proposal include just the baseline package or does it outline optional features of the system being installed?
- Is the MRO including other recommended options based on feedback from other operators who have installed the system?

Paint

According to Suzanne Hawes, Completions and Modifications Sales Rep, the number of variables that impact a quote for paint and interior completions work is nearly inexhaustible. Due to the variations between aircraft makes and models, it can be difficult to determine what the final quote includes. “Understanding everything included in the quote is key to getting the quality and appearance that you want out of an interior refurbishment,” she says.

- In addition to the base paint quote, does the proposal include painting the entry air stair?
- Does that include replacing the step tread or masking around it?
- How many stripes and stripe colors are included?

- Are metallic stripes an up-charge?
- Is there design support if the paint scheme is changing?
- What are the options if you request a custom or second base color, wing color, tail color, or logo?
- Is painting of the wheels and landing gear included?
- What is the warranty?

Suzanne says operators should remember that, “It is very difficult to clearly communicate a value that isn’t easily represented in a number.” For instance, Duncan Aviation recommends removal of certain inspection panel fasteners when an aircraft is being repainted. This helps to reduce paint chipping when fasteners are removed and reinstalled during future maintenance events and helps to ensure the paint will look nice for a longer period of time. “Asking about this process during the bidding phase of the project will help set expectations for everyone involved,” she says.

Interior

Aircraft interiors are another area where it can be even more difficult to gauge the extra effort and care that might go into the project but that isn’t clearly represented by a number. Some things Suzanne cautions operators

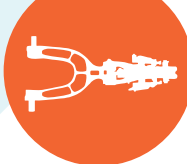
to clarify in their interior proposals include:

- Is the foam replaced during the seat upholstery or just the dress covers?
- What type of material is being quoted for upholstery of the divan, leather or fabric?
- Is rewadding of the seatbelts included in the upholstery of the seats and divan?
- If it is a partial interior, and the leather color is changing, are all the leather items quoted for recovery (curtains, entry door shrouds, lavatory seat, etc.)?
- Is the carpet being replaced hand-made or machine-made? Is the carpet pad being replaced and if so, is the new pad being installed equivalent to the existing pad or does it provide additional thermal or acoustical qualities?

Engine

Mike Bernholtz, Engine Service Sales Rep, says if you want the most complete quote for engine maintenance, provide as much





information as you can up front to your salesperson. “If logbooks are provided, we can accurately quote work on SBs (Service Bulletins), life-limited component replacements, and required ADs (Airworthiness Directives). If we are unable to review this information, the estimate could be off exponentially.”

Mike warns operators who have engines that are not on service programs to find out what level of service facilities are quoting. “If the quote simply has the lowest minimums available for the engine, I can guarantee you will end up paying more in the end. The MRO should be up front about the expected expenses and should let you know the parts and other components that typically need replacement.”

He advises that in addition to the base engine overhaul price, ask if the quote includes:

- Service Bulletin status
- Life-limited component replacement
 - Airworthiness Directives
 - Shipping charges
 - Discrepancies

Landing Gear

Landing gear quotes can be offered in a variety of pricing structures. NTE (Not To Exceed) is the most popular and the structure used most often at Duncan Aviation. With NTE, you are provided with the maximum quote and an assurance your final bill will not exceed that quote. Often, the final bill is under the NTE price.

Other options are Firm Fixed and Standard. With Firm Fixed, you are provided with the final bill before your gear arrives. It comes with a no bill-back guarantee, regardless of the condition of the gear. Standard Pricing includes all labor required to perform the normal inspection or overhaul and required parts. Any discrepancies found during the inspection that require additional parts and labor will be quoted over and above.

Jon Hein, accessories service sales rep, says each pricing structure has its advantages and advises you to select the one that makes the most sense for you. However, be aware of the exceptions. “Pay close attention to the exclusions on the contract,”

Jon says. “They can add extensive additional costs not included in the quote.”

These include

additional customer requests, optional Service Bulletins, missing or abused parts, replacement of life-limited parts, and engineering fees, if required.

When reviewing your landing gear proposal, ask the following:

- Does it include shipping costs for outsourced components?
- Are parts or other special programs included in the pricing?
- What are the contract exclusions?
- What parts are considered over and above?
- Are discrepancy and repair costs included in the labor flat rate?

Aircraft Projects Are Team Projects

Evaluating the many quotes an operator receives in the course of preparing for an aircraft service event can be an overwhelming experience.

“Ultimately, the success and satisfaction of a project is a team effort,” says Skip Laney, Service Sales Rep. “The customer is as much a part of the team and its success as we are.”

The bottom line is that you should feel comfortable calling the MRO salesperson and having them walk you through the quote so you can better understand the proposal details as well as the ultimate workscope.





**DUNCAN
AVIATION**



AOG?

Call +1 402.475.2611



Everyone knows that it is expensive to have an aircraft unable to fly. Duncan Aviation's engine Rapid Response Teams are positioned to answer your call, fast. We have 35 technical engine experts located at 16 launch offices, poised to provide AOG assistance and in-field maintenance work, even for program engines. We'll develop a logistics plan and timeline within two hours of your call and coordinate with you to return to service ASAP. We can also support you with an extensive engine loaner pool that includes HTF7000s, HTF7350s, and TFE731s.

www.DuncanAviation.aero/aog
Experience. Unlike any other.



www.DuncanAviation.aero/adsb

Find Your ADS-B Solution. Tap Into Our Experience.

In 2017, the 26 Duncan Aviation Satellite Avionics shops installed ADS-B (Automatic Dependent Surveillance-Broadcast) systems in dozens of different models of aircraft, performing 237 upgrade/installs. The main facilities in Lincoln, Nebraska; Battle Creek, Michigan; and Provo, Utah; performed an additional 83 upgrades. Counting installations performed before 2017,

Duncan Aviation has completed more than 520 installations.

“For 2017, we allocated space and labor for 300 upgrades. The more upgrades on different models we performed, the more we increased our efficiency and ability,” says Manager of Satellite Operations Matt Nelson. “As a result, we’ve increased our capacity to 460 installations in 2018.”

Because of the great numbers of aircraft that still need updating



www.DuncanAviation.aero/videos/adsb

ADS-B Watch and Learn

By Senior Avionics Sales Representative, Gary Harpster

I have been in the aviation world for more than 45 years now, and the one thing you come to recognize is patterns. This ADS-B mandate is just that—a pattern. Owners and operators need to comply with it. There are a lot of factors starting to truly affect the choice of when it gets completed. This video is an effort to help clarify those factors. I want owners and operators to understand that they absolutely **MUST** have ADS-B, or flying as they know it today will quickly become a fading memory after midnight on December 31, 2019.

in the 19 months until the FAA's ADS-B mandate deadline, Duncan Aviation is encouraging owners and operators to take advantage of this increased capacity.

“We've been saying the same thing for years—upgrade now, don't wait until the last minute, the deadline isn't going to change, and prices are not going to drop,” says Matt. “We really want to reiterate that there are no magic bullets on the horizon for your ADS-B upgrade. The OEMs have spent millions of dollars developing solutions for their platforms, and they aren't going to develop anything with a lower cost or that's easier to install in the final months before the deadline. In fact, most vendors have already announced price increases for this year and next.”

ADS-B Expertise & Guidance

All of the upgrades performed by Duncan Aviation equate to expertise—expertise that Duncan Aviation is willing to share. We have lots of technical know-how, plenty of experience, and we share technical and engineering resources across facilities. This knowledge can help

operators determine the best path for compliance for their specific aircraft and their specific needs.

In Atlanta, Georgia, for instance, Satellite Shop Manager Edduyn Pita had a full shop last year, and he and his crew upgraded the following models for ADS-B:

- Citation 551
- Gulfstream 200
- Citation 560XLS+
- Gulfstream Astra SPX
- Gulfstream G150
- King Air C90
- Socata TBM-700
- Falcon 2000

For the first quarter of 2018, the Atlanta Satellite Shop was booked for ADS-B upgrades, and they added a Cessna 421 to their growing list of expertise.


In America's heartland, Kansas City, Missouri, Shop Manager Jeff Aman and his crew upgraded the following models for ADS-B compliance:

- Cessna 525A
- Beech B200
- Beech C99
- Hawker 850XP
- Cessna 210D
- Learjet 45

- Cessna TR182
- Learjet 35A
- Challenger 300
- Gulfstream G150

On the West Coast, Sacramento, California, Satellite Manager Bob Hazy and his crew performed ADS-B upgrades to the following models:

- Pilatus PC-12/45
- Pilatus PC-12/47E
- King Air B200
- King Air B300
- Citation 650
- P180 Piaggio
- Beechcraft 390
- Citation 501
- Piper PA-32R-301T
- Cessna T182T
- Diamond DA42
- Diamond DA40

Many of these upgrades could not have been performed at all had it not been for the Duncan Aviation Engineering and Certification teams who have developed several of the STCs (Supplemental Type Certificates). We hold or have access to 42 FAA-approved solutions for ADS-B, and that lets all of our facilities, Satellite Shops, and workaway teams perform upgrades on more than 100 aircraft models. 

3D

Duncan Aviation Lead Designer Rachael Weverka recently worked with a customer who wanted extensive renovations on his G-V (Gulfstream V). He was a designer's dream in that he was easygoing, knew what he wanted, and was open to her ideas. But before he would sign a contract, he wanted to see how the colors, patterns, and materials all came together.

Rachael worked with Dan Ryba, one of Duncan Aviation's Multimedia Illustrators, who produced conceptual renderings of what an aircraft would look like with the proposed design.



**RENDERINGS
HELP CLIENT
ENVISION
FINISHED
AIRCRAFT**



BEFORE



3D



FINAL



FINAL



3D

**“ ... THE 3D
RENDERINGS
REALLY TAKE
AWAY THE
GUESS WORK. ”**

“I’d met with our customer at his hangar, and he was anxious to get started on the project because he had an upcoming flight overseas and needed the renovations completed prior to that trip,” says Rachael. “Once he saw Dan’s renderings with the materials selected, he signed the contract, and we got to work.”

Completions and Modifications Sales Representative Joep Cuppens also worked on the project, which included custom-designed exterior paint.

“We can’t all envision what a finished project is going to look like, and the 3D renderings really take away the guess work,” says Joep. “Several of my customers have asked for them, and they’re delighted by what we produced. Even better, they’re especially pleased that the finished product looks like the renderings.”

CARPET CONUNDRUM

The timeframe for the workscope was a bit tight, and Rachael immediately ran into a potential delay that presented challenges.

“The owner liked the concept of his existing carpet but wanted to change it slightly for an updated look,” says Rachael. “Unfortunately, the existing carpet required all hand-stitching, which adds quite a bit of time to the manufacturing process. We knew that wasn’t an option,



so I redesigned it to be mostly machine-made with some custom overtufting for the pattern.”

After discussing the challenge with the carpet manufacturer, Rachael was told if she created the computer templates for the repeating patterns that she had designed, they could make the carpet according to her specifications. She created the templates and sent them to the manufacturer. Using those templates, the machine that stitched the carpet incorporated Rachael’s patterns, and the manufacturer was able to make and deliver the carpet on time, keeping the project on its tight schedule.

IT’S ALL IN THE DETAILS


In addition to paint, the exterior renovations included new entry steps, which were a unique design combination of polished aluminum panels for the risers and black step tread. The mirrored finish is quite striking, and the customer loved them!

Rachael’s designs made big changes to the interior of the aircraft, right down to the smallest detail. For instance, the faucet was a standard faucet that needed to be updated to match the new interior. Rachael had a faucet in mind; it was one she’d used on another G-V.

“This new faucet is a lot like the one that’s commonly used on many aircraft but is constructed to be more durable,” says Rachael.

The new black Corian countertops served as perfect complement to the veneer with its dark grain, and the eye-popping cream accents kept the cabin from appearing too dark. The black pinstriped divan brought in some masculinity, and the soft, cashmere-covered pillows at every seat provided warmth and contrast.

For extra comfort during overnight flights in and out of the United States, Rachael found a company that makes custom linens, pillows, and foam beds that are contoured to each seat.

“The big challenge for this project was the time frame; we wanted to meet the original delivery date so the customer could use this aircraft for an overseas flight,” says Rachael. “The quick decisions by the owner were made possible by the conceptual renderings, and with the incredible efforts of all of the team members who worked on this aircraft, we were able to deliver on time. 

www.DuncanAviation.aero/galleries



Don't Be Afraid Of Commitment

Six Pitfalls Of A Non-Exclusive Relationship



The variety of challenges presented to you as an aircraft broker ensures that no two days are the same. Meeting clients and prospects and dealing with prospective buyers all bring various opportunities and challenges, so it's always immensely satisfying to see the results we achieve as a team."

Tim Barber, Aircraft Sales Representative in Europe



Case Study

Duncan Aviation Tech Rep Ron Grose Confirms Complicated Aircraft Sale Worth the Hassle
www.DuncanAviation.aero/case-study/aircraft-sales

Aircraft sales brokers talk frequently to owners who believe they are better served having their aircraft represented by multiple brokers rather than committing to an exclusive agreement. They believe this will raise the aircraft's market exposure, increasing the likelihood of it selling quickly, and result in a more lucrative transaction. However, this is rarely the case.

A leading aircraft broker will typically not enter into a non-exclusive contract. Here are six reasons why you shouldn't work with one who will.

Exclusivity Counts

Tim Barber, Duncan Aviation Aircraft Sales Representative in Europe, met with an owner who had two aircraft for sale. One was already on the market without an exclusive agreement and the owner was planning to make the same sale arrangements for the second aircraft.

After 30 minutes of research, Tim found that the first aircraft was represented by five brokers at three prices, with different total aircraft hours. One broker even failed to mention the engine

programs. "This illustrates the feeding frenzy mentality and misinformation that prevails when an aircraft is released in the market without exclusivity," says Tim.

Tim secured the exclusive agreement of the second aircraft when the owner learned how his first aircraft was being represented.

In Whose Interest?

With no certainty of getting paid, non-exclusive brokers typically will not invest a lot of time and money to thoroughly represent an aircraft. Because such agreements create competition among brokers instead of buyers, the non-exclusive broker may lean toward persuading the seller to lower the price quickly in an attempt to get the first bite. There is no incentive for a non-exclusive broker to make the effort to ensure that the seller's best interests come first.

Sight Unseen

Non-exclusive brokers rarely, if ever, conduct an on-site inspection of the aircraft and/or review log book records or meet with the owner or the designated decision maker for the sale. An aircraft's log book records are very important to



Best Practices

When you are ready to buy or sell a business aircraft, we recommend you look for a broker who is a NARA (National Aircraft Resale Association) member and has committed to following the NARA Code of Ethics. www.NaraAircraft.com

the sales process, and you want a representative who will thoroughly review and understand all of the details. If your aircraft is being represented by a broker who has not invested the time to accurately do so, the chance of representation errors is high. This may result in deals falling through, time being wasted, or problems being exposed that give negotiation leverage to the buyer late in the process.

Lose Control

If you enter into a non-exclusive agreement, you are essentially giving up control over how your aircraft is represented, what is being said about your aircraft, and by whom. This loss can result in damage to your aircraft's reputation in the marketplace. Dave Coleman, Duncan Aviation Aircraft Sales Representative, explains, "The leading professional brokers talk to each other and work together for the benefit of our clients. If we as a group are unable to dispel rumors about poor maintenance, corrosion, damage history, or missing records, or we aren't getting the answers we need to advise our acquisition clients with confidence, we will recommend

to our clients to walk away." Dave continues, "This is compounded when an aircraft is located in a remote area where communication is delayed. No one wants to go on a wild goose chase to inspect an aircraft that has lots of question marks."

Under Exposure


Getting an aircraft sold quickly is the primary objective of any broker, exclusive or not. With the business aircraft resale market being very challenging and overcrowded in recent years, you want to make sure your aircraft appears on more than a small website listing. Are they investing their own advertising dollars to get your aircraft on the most visible channels, like *Controller.com* and *AvBuyer.com*? Are they planning any print advertising in leading aircraft sales journals? Do they have a large customer base? Do they have the technical and import/export resources to deal with any surprises? Without these efforts and resources, your aircraft will be largely invisible to many buyers.

Paying More For Dis-service

Everyone wants to obtain the best value possible with their

investments. But ironically, a lack of transparency is the result when dealing on a non-exclusive basis. Maybe it means multiple brokers have a hand in the transaction, or an undisclosed back-to-back transaction is contemplated. Therefore obtaining a trusted advisor who stands shoulder-to-shoulder with the seller and provides a full complement of marketing, technical, and regulatory services is, at least, insurance against a costly error, and at most, an opportunity to net tens of thousands more for the aircraft.

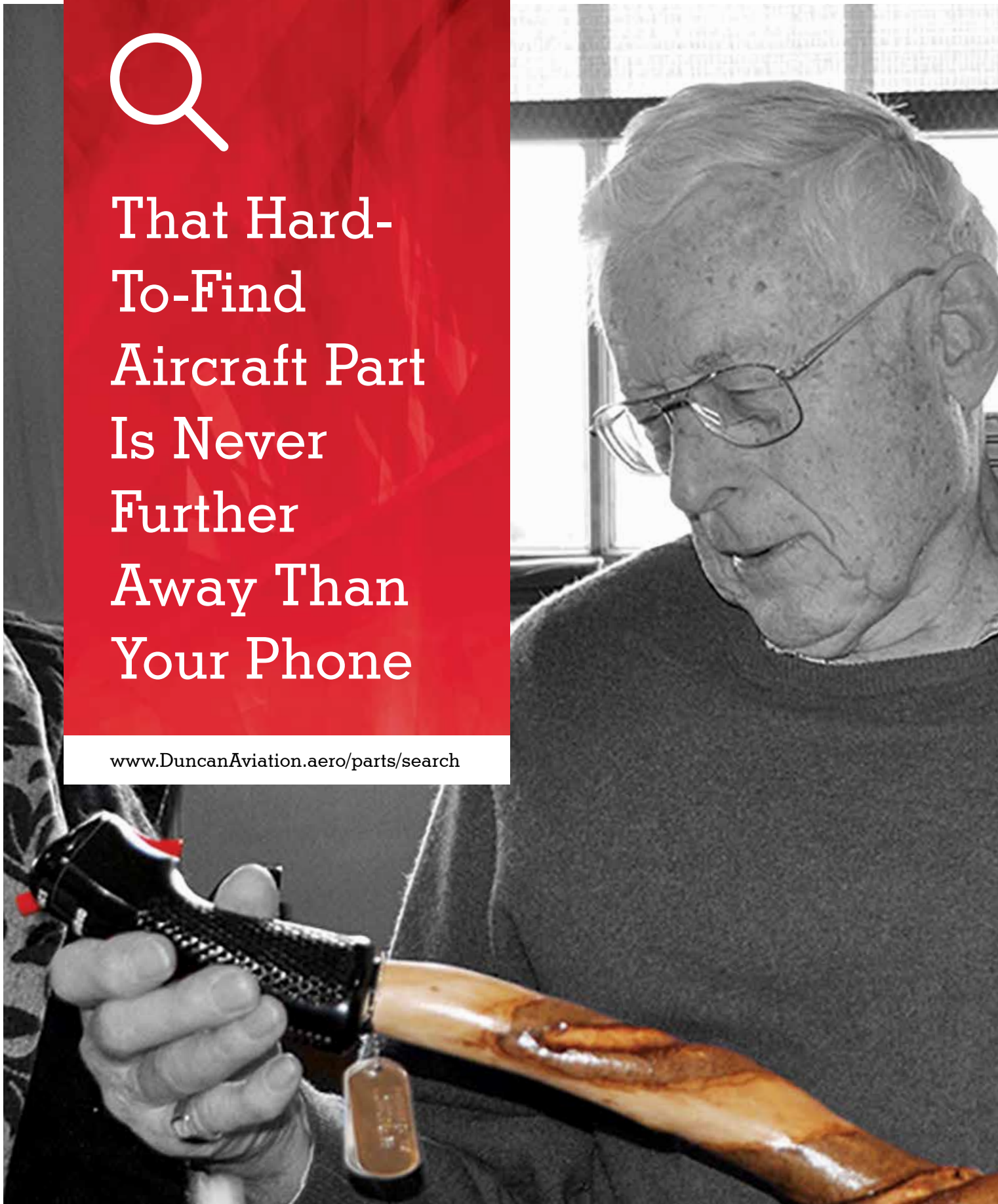
Identifying the right aircraft sales broker is time well spent. The right broker will be the one who listens to your needs, advises you on the best course of action, exposes your aircraft in the best manner, and stays with it until it's done. The right broker is someone whom you trust.

We recommend an exclusive mandate agreement with a professional who has an international team and true global reach. It is the right way to do business. It is how Duncan Aviation does business. 



That Hard-To-Find Aircraft Part Is Never Further Away Than Your Phone

www.DuncanAviation.aero/parts/search



The aviation world is a pretty big place. Sometimes locating the aircraft part you need is like trying to find the proverbial needle in the haystack, especially if it's from a World War II fighter jet. But the fact is, more often than not, Duncan Aviation's massive inventory of parts, rotables, and exchanges for aircraft has exactly what you are looking for.

Darrold Comber suspected his search would not be an easy one. His needle? A joystick from a Grumman F6F Hellcat Fighter with working buttons. After an online search showed Duncan Aviation listing the part in stock, he picked up the phone and called Lance Tophoj, Duncan Aviation Parts & Rotables Sales Rep.

With several joysticks available, Darrold asked Lance if he would personally pick out the nicest one with working buttons, because he had something special in mind for his father-in-law's 90th birthday.


Summit Lippincott, Darrold's father-in-law, has been an aviation enthusiast for most of his life. To him the Hellcat joystick holds significant meaning because his older brother, Benjamin, a World War II Navy Grumman F6F Hellcat fighter pilot, tragically died during a training exercise in 1945 while assigned to the Naval Air Station at Boca Chica, Florida.

Because of his profound respect and admiration for his older brother's courage and service to the United States, his children, grandchildren, and great grandchildren have consistently heard his memories and stories about growing up with his brother.

In honor of Summit's milestone birthday and in memory of Benjamin, Darrold, created a one-of-a-kind handmade cane that featured a Grumman F6F Hellcat joystick as its handle. Two custom-stamped dog tags were added as the finishing touch.

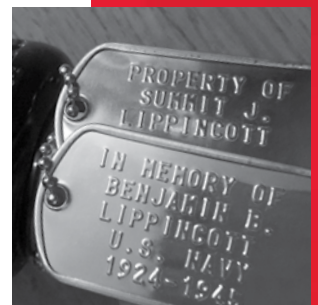
The team members with Duncan Aviation Parts & Rotables Sales never shy away from a challenge. With access to more than \$500 million in parts inventory and worldwide industry contacts, they operate on the premise of "If we don't have it, we'll find it!"

The reason we are able to offer this level of service is because of the extensive network of aviation industry contacts we've built through the years and the fact that we are available on our customers' schedules, 24/7/365. Our inventory is competitively priced and checked against the industry marketplace regularly. All this, on top of our multiple OEM relationships and multitude of service agreements, is how our wide base of capabilities keeps customers flying.

Our large and constantly growing rotatable and exchange pool is never further than your telephone. And with a primary inventory of more than 485,000 line items, we'll usually be able to handle your parts needs from stock. We like to say, we specialize in needles. 



Darrold Comber
(right)





Special Needs Interns Help Duncan Aviation While Helping Themselves

During the 2017-2018 school year, the Duncan Aviation facilities in Battle Creek, Michigan, and Lincoln, Nebraska, hosted 15 students with special needs in two internship programs: Project SEARCH and VOICE. Students who have finished their high-school courses but are willing to hold off getting their high-school diploma or certificate of completion until they finish their internships are eligible for the programs.

For the third year in Battle Creek, students from school districts in Calhoun County participated in Project SEARCH, which is an international program designed to help students with cognitive impairments, learning disabilities, and autism develop work and life skills that will help them find competitive employment.

In its second year at the Lincoln facility, the local VOICE (Vocational Opportunity In Community Experience) program pairs students with cognitive and/or physical impairments or learning disabilities with organizations in the community

to help them gain job skills and develop life and communication skills so they can live independently.

“The VOICE and Project SEARCH programs have become a part of our Duncan Aviation Family, and I am proud of how we have all embraced the student interns,” says Connie Duncan, wife of Duncan Aviation Chairman Todd Duncan and a member of the Lincoln School Board. “I’ve always said we will learn just as much from them as they will learn from us. I was a special education teacher for 17 years, and I understand the importance of programs that provide on-the-job training. Everyone wants to feel like a contributing member of society, and these programs give student interns a chance to learn work and life skills so they can contribute to their communities, too.”

OJT/Classroom Combined

At both facilities, student interns work with a Duncan Aviation mentor and are part of a team for half-day shifts. After taking a break for lunch, the students then convene

in on-site classrooms with teachers from their respective districts for several more instructional hours. In the classroom,



and they take a great deal of pride in their work.”

In the Interior Shop, interns

the students work on skills such as writing and sending workplace-appropriate email, preparing resumes, developing interview skills, navigating workplace communication, resolving disagreements with co-workers, and maintaining employment. They're also taught practical information about self-advocacy, leases and rental agreements, household budgets, transportation options, and financial literacy.

These internships are fully immersive—students often interview for their positions, go through new employee orientation, show up for work on time, stretch if their department stretches during their shift, perform their assigned tasks, attend staff meetings when they're scheduled, and participate in holiday lunches and department potlucks, including bringing a dish to share.

“Working at Duncan Aviation is a life-changing experience for our students,” says Sheila Ritsema CISD–Project SEARCH Teacher at Duncan Aviation in Battle Creek. “They really love this program. As they come out of high school


and into Duncan Aviation, they're treated as adults and accepted by all of the team members as just another Duncan Aviation employee. We really see their level of maturity increase as a result of these internship opportunities.”

Everyone Benefits

The VOICES program has been part of the Lincoln Public Schools for more than 14 years, and Duncan Aviation is one of 11 area organizations that participate. The 10 students in Lincoln rotate to a new position in a different department every nine weeks from September through May.

“We encourage them to pursue internships that align with their interests, and we ask them where they'd like to be in a year, five years, and 10 years to get them to look more broadly at their roles here,” says Lisa Thiessen, Lincoln Public Schools Special Education Teacher with VOICE. “During this cohort, students have served internships in Facilities, Shipping & Receiving, Interior Completions, and Avionics,

have checked for expired products while performing shop audits, straightened the Cabinet Shop, maintained equipment, and helped with various office tasks. In Shipping & Receiving, they help with receiving, checking packages in and sorting them for delivery. In Avionics, interns are responsible for entering part numbers in the database and tagging old equipment that's been removed from aircraft. The Facilities shop keeps the interns busy cleaning hangars and bathrooms throughout the company.

“Because our students are capable of doing these jobs, they take on quite a bit of responsibility,” says Sheila. “We hear back from their team leaders and mentors that when they teach the students to do their jobs, that creates another independent team member and frees other team members' time for other tasks,” says Sheila. “It's really a great experience for everyone involved, and especially the students who are learning transferable, marketable skills. They know how to follow directions, be safe, follow a checklist, and use various tools.” 



Project SEARCH:

Training Students In The United States & Six Other Countries

Started at the Children's Hospital Medical Center in Cincinnati, Ohio, in 1996, Project SEARCH (projectsearch.us) trains people with developmental disabilities so they can secure competitive employment.



WOMEN in Aviation A CAREER for the TAKING



Sarah White

Jayne Park



Many women work daily in technical roles at Duncan Aviation. These women are airframe mechanics; avionics and engine technicians;

interior and paint specialists;

design, electrical, computer, and structural engineers; and flight line reps. Even though aviation is traditionally a male-dominated field, there are plenty of career options available for women with rapid growth and excellent salary potential.

Read on about four of these women—an airframe shift supervisor, landing gear master technician, avionics crew leader, and an engineering designer—who have decided to

take the road less traveled and make their way and careers in aviation at Duncan Aviation.

Do What You Love

At the age of seven, Jayme Park had her first experience floating in a hot air balloon. But it wasn't

until the young impressionable age of 12, when she rode in a D23 biplane at an airshow, that she knew she wanted a career in aviation. "I was hooked."

She pursued that dream and for the last 21 years, Jayme has been working for Duncan Aviation in Battle Creek, Michigan. She is the shift supervisor leading teams of airframe, engine, fuel, interior, and accessories technicians. She has enjoyed her tenure and feels very fortunate for her career at Duncan Aviation. "I

am lucky. I get to do what I love, for a company that values me for my skills and leadership abilities."

"I am lucky. I get to do what I love, for a company that values me for my skills and leadership abilities."

Jayne Parks, Shift Supervisor

Be Confident In What You Know

Sarah White has had two aviation careers. The first, courtesy of the United States Air Force, took her around the world working on hydraulics, flight controls, wheels, inflight refueling, and weapons systems aboard Boeing B-52s, F-4 Phantom II fighters, and KC-135 Stratotankers.

After retirement from the military, her second aviation career began when she saw an advertisement for a hydraulics technician in Lincoln, Nebraska, while reading her newspaper and drinking her morning coffee. Twenty-three years later, Sarah is the senior member of the team and a master technician overhauling landing gear for business aircraft such as Challengers.

Being the only woman on a team of men is not without its conflicts, but Sarah says for the most part it has been a positive experience.

“Bias happens, but not as often as you would think.” Her advice to anyone doing what she does is to be confident in what you know and then put your head down and do the work. She says it’s customers who are sometimes caught short when she is called in for a consultation. “But as soon as I begin talking intelligently about the squawk and what I am going to do about it, we move past it quickly.” She says it is important to be able to take pressure and criticism on the job, no matter who you are.

Encourage And Support Others

After five years in the U.S. Navy and with an advanced electronics and avionics degree from Colorado Aero Tech, Kelly Allman found her way to Duncan Aviation in 1999 and onto the hangar floor as an avionics installation technician. Her first assistant manager was another woman, who from the very beginning expected the best from Kelly. “She always expected the most out of me and held me and the rest of the team to a very high standard.” Kelly is very appreciative of her

expectations, advice, and encouragement because “I wouldn’t be where I am now without it.”

Today, Kelly is a crew leader of a team of nine avionics installation technicians. She expects the best from them. “When you’re touching these aircraft, you have to bring your best. You are touching lives. It doesn’t matter if you’re male or female.”

Just Do It

As the only engineer at Duncan Aviation’s Provo,

Utah,

location,

Karen Itin is

kept busy creating schematic drawings for interior structures supporting aircraft cabinets, seats, and antennas. It is this behind-the-scenes aspect of her work that she likes most about her job.

When she first started, technicians would come off the floor looking for the design engineer, and it was obvious they were looking for a man. “You can’t take it personally. Instead, you use it as an opportunity to communicate and show them what you can do.”

Her advice to young women thinking about exploring a career in a field that has been traditionally dominated by men is to “Just do it!” The only limitations are the ones you place on yourself. To get more women in the field is to be the woman in that field. Be brave. You can do it. Others will come join you.”



Kelly Allman

“When you’re touching these aircraft you have to bring your best. You are touching lives. It doesn’t matter if you’re male or female.”

Kelly Allman, Avionics Line Crew Leader



Karen Itin

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

News & Tech Updates



Collaboration for Gogo AVANCE L5 on Challenger Aircraft

Duncan Aviation collaborated with Bombardier Business Aircraft to develop STCs (Supplemental Type Certificates) for the Gogo Business Aviation AVANCE L5 system hardware on in-service Challenger series aircraft.


The new and faster 4G service uses Gogo AVANCE L5, a lightweight and compact system that, operating on the Gogo Biz 4G ground network of more than 250 towers, provides reliable connectivity over the continental U.S. and parts of Canada and Alaska.

The STCs apply to Challenger 604/605/650, Challenger 300, and Challenger 350 aircraft. 

Duncan Aviation Named Top CASP Dealer


Rockwell Collins named Duncan Aviation as a top CASP (Corporate Aircraft Service Program) dealer for 2017. Scott McKenzie, Aftermarket Warranty Program Administrator for Duncan Aviation, says, “We want all of our customers to have the best protection possible and will work with them to ensure their CASP plan is written properly in accordance to their aircraft and its systems.”

Duncan Aviation not only sells CASP contracts but services them as well. “There are many advantages of purchasing an aftermarket warranty program from a company that can service it,” says Matt Nelson, Avionics Satellite Operations Manager. “Duncan Aviation has locations and teams within 150 miles of the top 100 busiest business jet airports in the United States, and we waive all program service fees if the warranty contract is purchased from us.”

CASP as well as HAPP (Honeywell's Avionics Protection Plan) programs, are available for purchase at any Duncan Aviation location, including the three full-service maintenance, repair, and overhaul facilities and any of the 26 avionics satellite and workaway locations across the United States. 

ADS-B Benefits for GE OnPointSM Customers

In an effort to help business jet operators more easily meet the upcoming ADS-B (Automatic Dependent Surveillance-Broadcast) mandate and prevent potential operational disruption for their customers, Duncan Aviation and GE Aviation have collaborated to provide ADS-B benefits to GE's OnPointSM engine service customers through Duncan Aviation's nationwide full-service and satellite avionics facilities.

Under this new program for OnPoint customers, installation labor related to ADS-B upgrades and engine prognostics hardware is discounted under OnPoint service agreements. GE offers Prognostic Health Management PLUS, an engine prognostic health management solution that facilitates more advanced monitoring and analyses of engine performance and provides FOQA (Flight Operational Quality Assurance) safety services. New OnPoint customers are also eligible to receive these discounts for engine monitoring and ADS-B. 



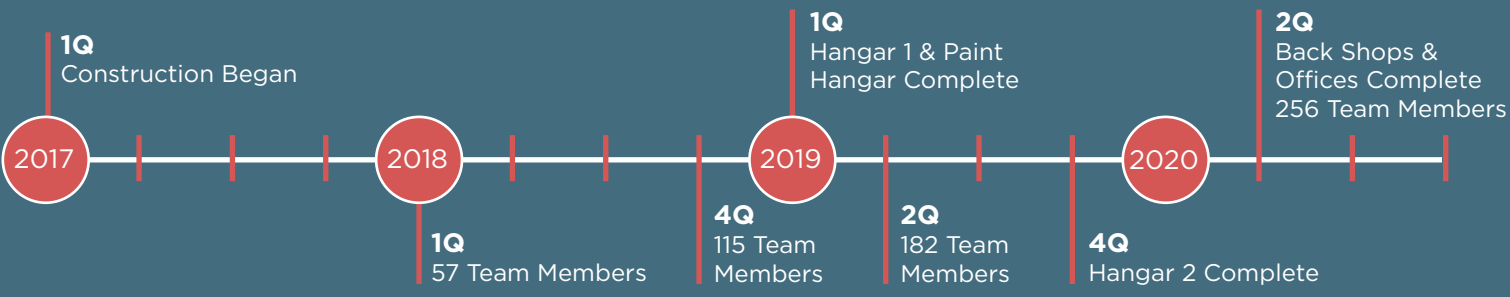
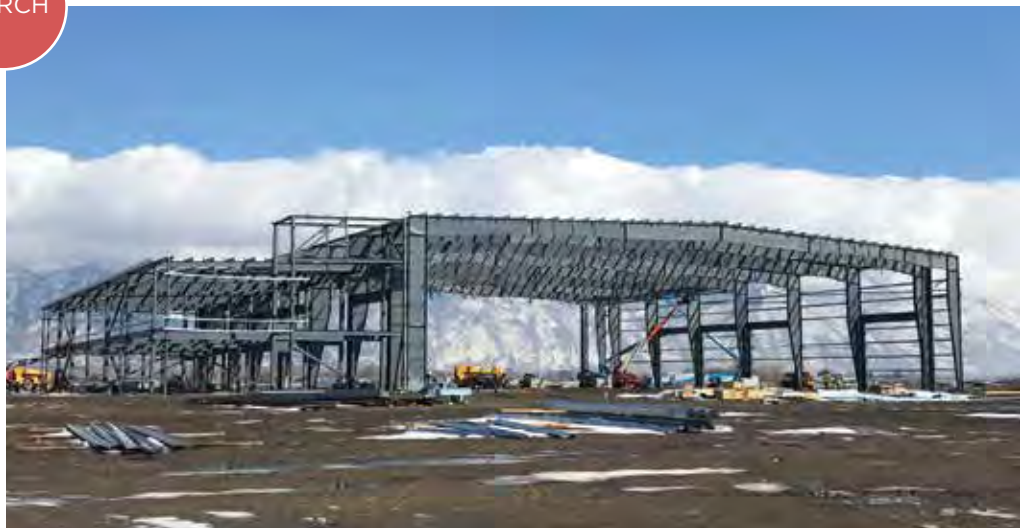


2018



MARCH

Provo Update






Three STCs Developed for Embraer Legacy

Duncan Aviation recently completed an industry first installation of the Honeywell Primus Elite (DU-875 displays) in an Embraer Legacy. The DU-875 upgraded electronic displays in the cockpit because the old screens had been discontinued, and the new screens provide additional charts and graphical weather information. Duncan Aviation and Honeywell Aerospace also completed two other STCs for the Embraer Legacy, covering the installation of the following:

- Upgrade of the Honeywell FMZ-2000 FMS to FMZ-2010 for LPV/WAAS (Localizer Performance with Vertical Guidance/Wide Area Augmentation System) capabilities.
- The Honeywell CMU MKIII, which brought the aircraft into compliance for Future Air Navigation Systems (FANS 1/A+). FANS is mandatory for flying in the NAT (North Atlantic Tracks).

One of Duncan Aviation's existing STCs was also used to install the Honeywell MK V EGPWS (Enhanced Ground Proximity Warning System) RAAS (Runway Awareness and Advisory System) and Smart Runway/Smart Landing equipment. And an STC developed by CMD Flight Solutions was used to install the Honeywell Primus II RCZ-8XX transponders, bringing the Legacy into compliance with the FAA's mandate for ADS-B Out a full two years before the midnight deadline on December 31, 2019. 



ADS-B Straight Talk Book Updated

We recently updated our Straight Talk book on ADS-B. Originally written in February 2015 and periodically updated by a team of Duncan Aviation's knowledgeable avionics professionals, the Straight Talk book was most recently updated in January 2018 and is intended to provide practical information about all aspects of ADS-B for the owners and operators of business jets.

The FAA's January 1, 2020, deadline for upgrading to ADS-B-compliant equipment gets closer every day, and there are still several thousand owners and operators who need to make the necessary equipment upgrades to their aircraft. Flying without ADS-B after midnight on January 1, 2020, is going to be fraught with limitations.

Why wait and risk a potential AOG situation? Download a copy of Duncan Aviation's ADS-B Straight Talk book. www.DuncanAviation.aero/resources/straight-talk/ads-b 



BoomBeam Lighting Installed in Phenom 300

Duncan Aviation recently installed LoPresti Aviation's BoomBeam HID (High Intensity Discharge) lighting system in a Phenom 300, the first in the industry to receive the upgrade.

The BoomBeam HID lighting system replaces older technology while providing lights that produce three to 15 times more light, engineered specifically for each model aircraft. Benefits include increased safety, reduced electrical load and heat output, decreased AOG time for lighting issues, and a color that more closely approximates natural daylight.

Aircraft Listings

Our inventory is always changing. Visit www.DuncanAviation.aero/aircraftsales for more information on our current aircraft listings.




2002 Falcon 2000, SN 195



2015 Falcon 2000XLS, SN 310


LoPresti Aviation manufactures lighting systems for multiple aircraft makes and models, with STC and PMA (Part Manufacturing Approval) covering more than 550 aircraft models.

To see a demonstration of the BoomBeam lighting system, customers are encouraged to contact Duncan Aviation and schedule a visit at one of our locations. We have a portable demo unit available and would encourage anyone interested in the technology to schedule a time to see it first-hand. 

CJ3 Pro Line Fusion Upgrades Underway in Nebraska, Michigan and Utah

A year after Duncan Aviation delivered the first Citation CJ3 aircraft equipped with the Rockwell Collins Pro Line Fusion integrated avionics upgrade, the company has seen great demand and is spooling up additional installation locations to make the upgrade even more convenient for customers. The first eight aircraft were completed at Duncan Aviation's facility in Lincoln, Nebraska. In April, Pro Line Fusion installations were in work at Duncan Aviation's Battle Creek, Michigan, and Provo, Utah, locations. Duncan Aviation has 11 CJ3 upgrades completed or in work with a total of 25 commitments.

Richard Boyer, President of Ontario, Inc., is one of the latest happy customers.

"I recently had Duncan Aviation upgrade my Pro Line 21 to the new Pro Line Fusion avionics," Richard says. "Because of the planned downtime, I decided to also do new paint and interior and have my three-year doc and other doc inspections completed. First off, my interaction with the team at Duncan Aviation was very pleasant. Even though the Lincoln facility has more than 1,000 employees, I always felt I was doing business with a much smaller shop. They bent over backwards to keep me happy and went beyond what I expected when it came to getting the aircraft back to me on time. Because of the extensive work completed, I was bracing myself for the nuisance of finding squawks after taking delivery. However, after flying the aircraft for two months, their work has been squawk-free. On delivery of the aircraft, all the switches were in the right places and they even had placed all of my stuff correctly back in the drawers and pockets. Lastly, there were no unexpected billings to argue over. I highly recommend Duncan Aviation for any of the areas I had work: avionics, maintenance or paint and interior." 



Increased Engine Rental Pool

To meet increased demand from engine customers, we have increased our available pool of rental turbine engines. This pool now includes several rental engines for the following engine models: HTF7000, HTF7350 and TFE731 (-2C, -3, -5B, -20, -40, and -60).

James Prater, Manager of Turbine Engine Services, says our recent growth in engine capabilities and authorizations have increased customer demand for engine services,




2003 Gulfstream 300, SN 1510



1996 Citation Ultra, SN 560-0397




2006 Hawker 850XP, SN 258793

requiring the purchase of additional engines to use as customer rentals. “Customers want to be able to continue to fly while their engines are with us for CZIs (Core Zone Inspections). Through our extended engine pool and other rental engines that we have access to, we are prepared to help them locate a rental and continue their missions.” 




Additional Honeywell Primus II Capabilities

Our Avionics & Instruments Repair shop has added repair and overhaul capabilities for the Honeywell RM-855 RMU (Radio Management Unit), the primary interface used to control the Primus II radio system in the Primus 1000 and Primus 2000 flight decks.

With this added capability, Duncan Aviation is now able to service nearly all the units in the Primus II radio system. We have more than 25 years of repair and overhaul service experience on the RNZ and RCZ integrated Nav and Comm units, as well as the AV-850 Audio Panel, averaging more than 450 units every year. 

Now a Worldwide Repair Center for Avidyne Traffic Displays

In agreement with Avidyne Corporation, we are pleased to announce an extension to our repair service agreement designating Duncan Aviation as the exclusive worldwide provider of repair services for Avidyne’s MHD300 MHD (Multi-Hazard Display), EX600 MFD (Multi-Function Display), and ATD150 ½-3-ATI Traffic Display.

Since 2010, Duncan Aviation has provided similar exclusive repair and support services for Avidyne’s legacy display products including the 5-RR FSD, and the FlightMax 440, 450, 640, 650, 700, 740, 750, 800, 850 & 950 model MFDs, and in 2014 added Avidyne’s EX500 MFD repair support. 

Now a BendixKing Repair Partner

We were also recently named a BendixKing Repair Partner. This designation gives Duncan Aviation authorization to repair, overhaul and sell BendixKing components.

As a Repair Partner, Duncan Aviation will continue its long relationship with BendixKing and will provide 24/7 repair and overhaul service, support and sales for more than 100 BendixKing avionics and instrument units, including the following:

- KHF-950 System
- ART 2000/2100 Radar
- KFC-400 Autopilot System


The agreement includes all BendixKing repair capabilities that Duncan Aviation currently has and provides access to additional repair capabilities. 

Growth in Helicopter Component Repairs

Duncan Aviation’s Component Repair Services continues to be recognized by the helicopter industry, experiencing more than 80% growth 2017.

We have been servicing helicopter components for more than 40 years. Early repair and overhaul capabilities began with the Honeywell VG-14 H, C-14 D, and GH-14 gyros and have grown steadily ever since. In 2001, repair services for NAT (Northern Airborne Technology) avionics were added. And more recently in 2017, Duncan Aviation gained the exclusive repair service capabilities for the Avidyne 150 Traffic Display System and the expanded agreement with GE to begin repair capabilities on the 9000C and 9000F gyros.




More than 29 new customers have turned to Duncan Aviation for their helicopter component repair needs, including some OEMs. All indications say our helicopter component repair business will continue to grow as more discover what we bring to the table. 



Engineering & Certification Services Projects


In January 2017, we launched a program that made our highly regarded Engineering & Certification Services available for projects throughout the aerospace industry. This program expanded those services to include a team dedicated solely to supporting external requests.

“Since then, Duncan Aviation’s Engineering & Certification Service team has helped eight companies work through certification projects to develop and amend STCs,” says Shawn Carraher, Manager of Certification Programs with Duncan Aviation. “We have provided vital subject matter expertise and guidance to help these companies get their products certified and available in the aerospace market.”

For more than 20 years, our team members have worked on aircraft systems and structures and approved design changes for interior/airframe modifications and system installations and upgrades with an exemplary history of safety and compliance. Collectively, our Engineering & Certification teams have more than 1,269 years of engineering and aviation experience, which allows them to recognize, manage, and mitigate risk for customers for timely and efficient project completions. And in the last three years alone, the Engineering & Certification teams at Duncan Aviation have issued or amended 31 STCs. 



Bombardier ASF Excellence Award Winner

Duncan Aviation was recognized at NBAA last October by Bombardier Business Aircraft for its performance as a top authorized service facility in the support of Bombardier customers. Judged on a set of criteria that included quality, compliance, customer satisfaction and customer influence, Duncan Aviation’s Lincoln, Nebraska, facility was named the winner of the North America category of the 7th Annual Bombardier Authorized Service Facility Excellence Awards. In previous years, Duncan Aviation locations in Battle Creek and Provo have also earned this honor. 




Jake Keel

Provo Facility Adds AOG Road Trip Support

Jake Keel, Lead Mechanic for the Provo Challenger team, will now take his considerable knowledge, experience and tools on the road for customers who need assistance where their aircraft is located.

“I’m excited to hit the ground running with my new position, assisting Duncan Aviation customers any way I can at any time,” Jake says.

With eight years of experience as the lead mechanic on the Challenger team in Provo, Jake has been attending to Duncan Aviation customers whose aircraft are grounded. Now, his time is dedicated to providing AOG airframe assistance, and he is available 24/7 to assist AOG customers. 



Ethical Business Aviation Transactions Endorsed

Duncan Aviation endorses the guidance statement issued in December by the NBAA, entitled “Ethical Business Aviation Transactions.” The statement is designed to serve as a resource for ethical best practices for business aviation transactions and

addresses honest and ethical conduct, conflicts of interest, company funds and assets, business records, and compliance with state, federal and international law.

For more information about this statement, go here:

www.DuncanAviation.aero/company/code-of-conduct 



Chad Doehring



April Biscamp



Scott Kruce



Keith Schell




Tony Curtis




Cary Prange

Chad Doehring Named VP of Operations for Provo


Chad Doehring has accepted the position of Vice President of Operations for our Provo location. In this position, Chad joins our senior leadership team and will work closely with Provo Chief Operating Officer Bill Prochazka on the construction, recruiting and staffing of the new maintenance, modifications and paint complex we are building at our Provo location. 

Parts & Rotables Sales Adds Spanish-Speaker

Duncan Aviation is pleased to announce it has expanded and enhanced its Parts & Rotables Sales Customer Service with the addition of April Biscamp, a bilingual Sales and Customer Service Representative.

April is Duncan Aviation's new Parts Sales Assistant. In this role, she is instrumental in working directly with customers coordinating and reporting all core returns. Fluent in Spanish and English, she assists the Sales team developing quotes as well. 

Scott Kruce Joins Install Sales Team


Scott Kruce joined the Avionics Install Sales team in Lincoln. In the 10 years Scott has worked at Duncan Aviation, he has served as an Avionics Install Technician and Crew Lead. Installing avionics equipment on aircraft has given Kruce hands-on experience with both aircraft and customers, and he intends to use the knowledge he's gleaned over the last 10 years to help customers make the best decisions possible regarding their investments in equipment and upgrades. 

Leadership Changes to Components Repairs and Parts Sales Services

Keith Schell was recently named Manager of Components Repairs and Parts & Rotables Sales. This brings the company's components services areas together under a combined leadership team. The team is completed with the addition of Tony Curtis and Cary Prange, Assistant Managers for Components Repairs and Parts & Rotables Sales, respectively.

Since joining Duncan Aviation in 2015 as Parts Sales Team Leader, Keith has been rising steadily through leadership. In 2016, he became Manager of the Parts & Rotables Sales team.

As Assistant Manager of Components Repairs, Tony Curtis often needs to be two places at once leading more than 160 technicians as they inspect, install, troubleshoot, service, and repair virtually every type of equipment an aircraft might have, or need to have, aboard.

Providing daily oversight and leadership to nearly 30 aircraft Parts & Rotables sales professionals is all in a day's work for Cary. His team is working around the clock offering rotables, loaners, exchanges, outright units, avionics, instruments, accessories, and technical support to aircraft operators around the world. 



Dan Moog



Mike Dunham


Dan Moog and Mike Dunham Join Turbine Engine Service Sales Team

Dan Moog and Mike Dunham recently joined the Turbine Engine Service Sales team.

Dan develops new business relationships in new markets in the northeast region of the United States. He brings 25 years of aviation experience that includes aircraft engine and APU field service, regional sales, customer technical support, engineering support, and A&P technician experience.

Dan can be reached by calling +1 609.744.8738 or by email at Dan.Moog@DuncanAviation.com.

Mike brings 31 years of aviation experience and is introducing potential customers in the Great Lakes region to Duncan Aviation. This area includes Minnesota, Wisconsin, Illinois, Michigan, Ohio, West Virginia, and Indiana. Dunham specializes in Pratt & Whitney products supporting the Pratt & Whitney Canada HSI Repair facility located at Duncan Aviation's Battle Creek location. However, he will support all of Duncan Aviation's engine capabilities.

Mike can be reached by calling +1 608.842.0856 or via email at Mike.Dunham@DuncanAviation.com. 



Bob Tooker A Charles Taylor Master Mechanic

Bob Tooker, a Parts & Rotables Sales Rep and a long-time aircraft technician with Duncan Aviation, was recently honored as a recipient of the Charles Taylor Master Mechanic Award. The Nebraska Aviation Mechanics Seminar committee and the Federal Aviation Administration presented the awards at a banquet on the evening of January 26 in Kearney, Nebraska.

The Charles Taylor Master Mechanic Award is named in honor of Charles Taylor, the first aviation mechanic in powered flight. Award recipients are required to have worked for a period of 50 years in an aviation maintenance career and must have been an FAA-certificated mechanic or repairman working on N-registered aircraft maintained under the federal aviation regulations for a minimum of 30 of the required 50 years.

"I got here by standing on the shoulders of giants," says Bob.

And that's as close as he'll come to taking credit for his many years of service and his many successes.


Bob started working at Duncan Aviation in 1974 as an aircraft mechanic. As one of only 17 mechanics, he joined the team working on Learjet, Bonanza, Baron, and King Air aircraft.

"I took my first test flight with Harry Barr, who is a legend in the aviation industry," says Bob. "He was performing test stalls and wing checks, and that flight pretty much sealed the deal for me. I was hooked on aviation for the long haul!"

In 1984, Bob was asked to help develop a new division at Duncan Aviation: AVPAC (Aviation Parts, Avionics & Components). The group would manage an extensive inventory of parts for sale for various aircraft. Bob traveled around the country, buying old or wrecked aircraft to be parted out, inspecting potential consignment parts, and helping build the inventory from scratch.

His wife Cheryl has been by his side through most of his aviation career. Bob and Cheryl got married in April 1972 and have two children and four grandchildren.

Bob holds Robert Duncan, Chairman Emeritus of Duncan Aviation, in high regard.

"I've always felt encouraged and empowered by the trust Robert put in me early in my career," says Bob. "I want to thank him for the fun ride." 



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DUNCAN AVIATION



Cover: Shift Supervisor Jayme Park (second from right) has been working for Duncan Aviation in Battle Creek, Michigan, for 21 years. She leads teams of airframe, engine, fuel, interior, and accessories technicians. Finish Specialist Susan Hill, Upholstery Specialist Shannon Coburn, and Airframe Technician Beka Hughes (left to right) are a few of the expert team members she works with.