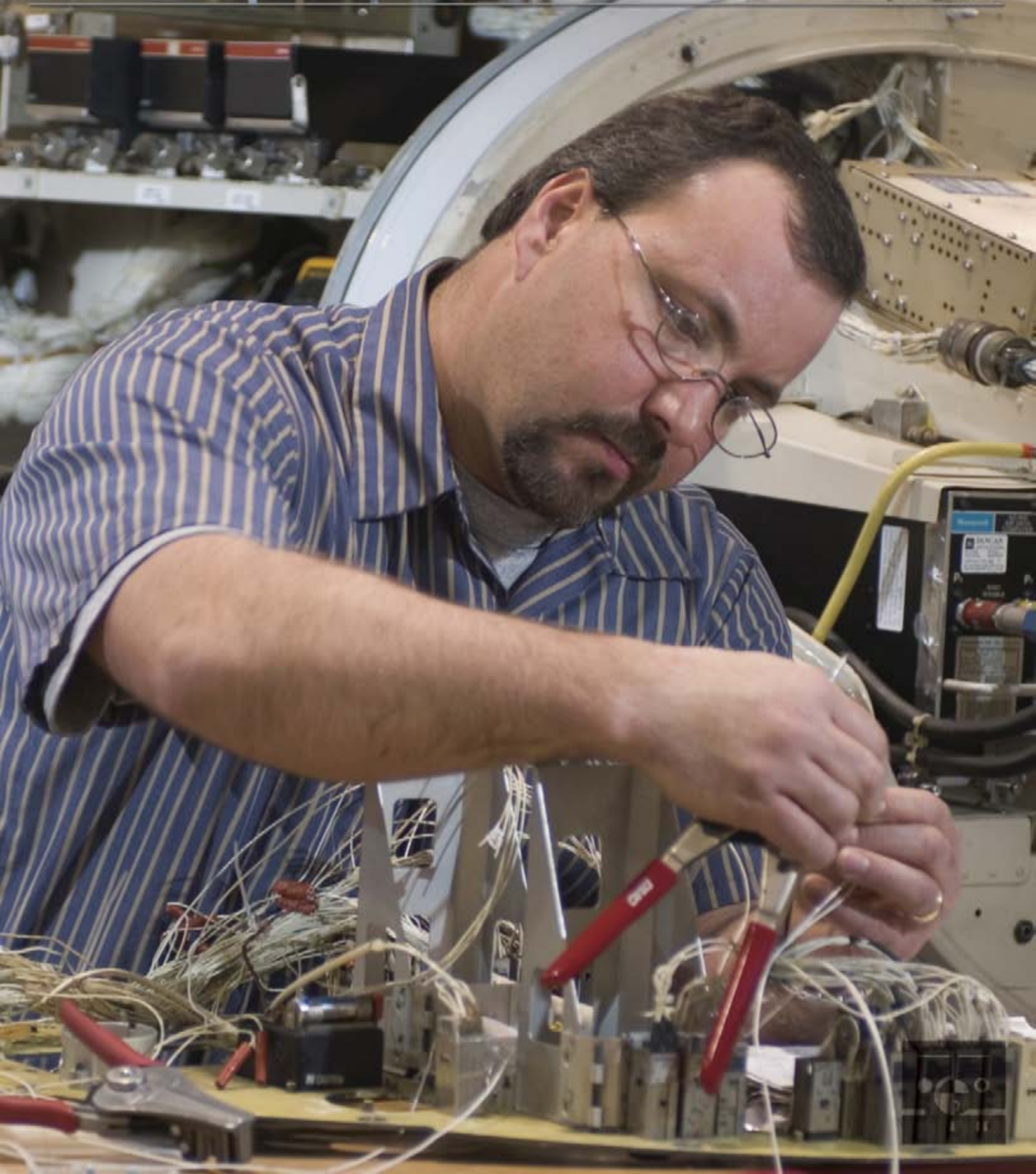


A DUNCAN AVIATION PUBLICATION

Duncan

Debrief

Spring 2008



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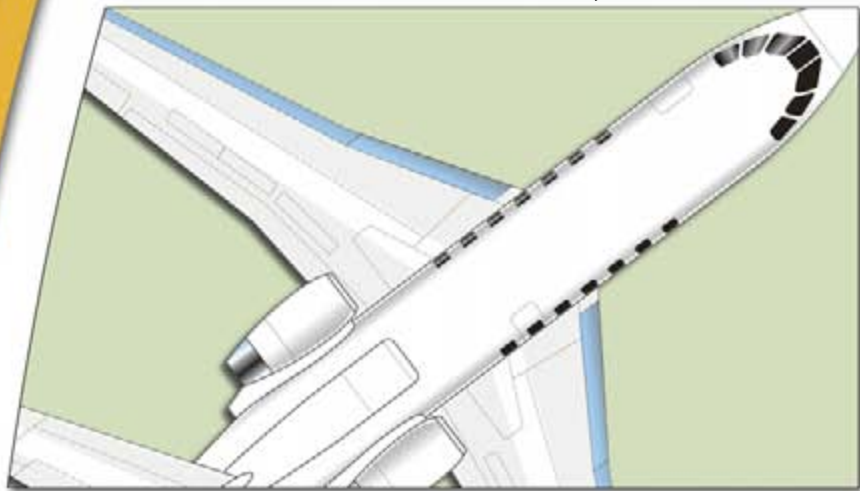
CREATING A COMFORTABLE INVESTMENT



PAGE 8

Transforming aircraft is our business and for this customer it was more than a radical update, it was a brilliant investment.

WAY TO GO FALCONS, WE'RE ALMOST THERE!



PAGE 24

The Falcon fleet has done a fine job preparing for the FAA's TAWS and RVSM mandates. Now it's time to prepare for ICAO's ELT mandate, Eurcontrol's Elementary Mode-S mandate and the safety of RAAS.

CHEESEBURGERS, DONALD & BILL



PAGE 32

Duncan Aviation has grown up with Learjets and continues to make strong friendships with Learjet operators.

Promises, Promises

When reflecting on business opportunities that are lost to competitors, it is tempting to ask the prospect what we could have done better. While this is important information, we believe this data pales compared to information provided by questions like "Why did you choose to do business with Duncan Aviation?" and "Why do you keep returning to Duncan Aviation?" In other words, it makes more sense to obtain an excellent understanding of what works.

Our recent findings to the above "what is working" questions shows some interesting trends. The elements that allow us to enjoy long-lasting relationships with so many great customers are really very basic. Although customer answers differed widely, they all boiled down to our company culture and our people. Several customers even used the terms *commitment* and *promise*.

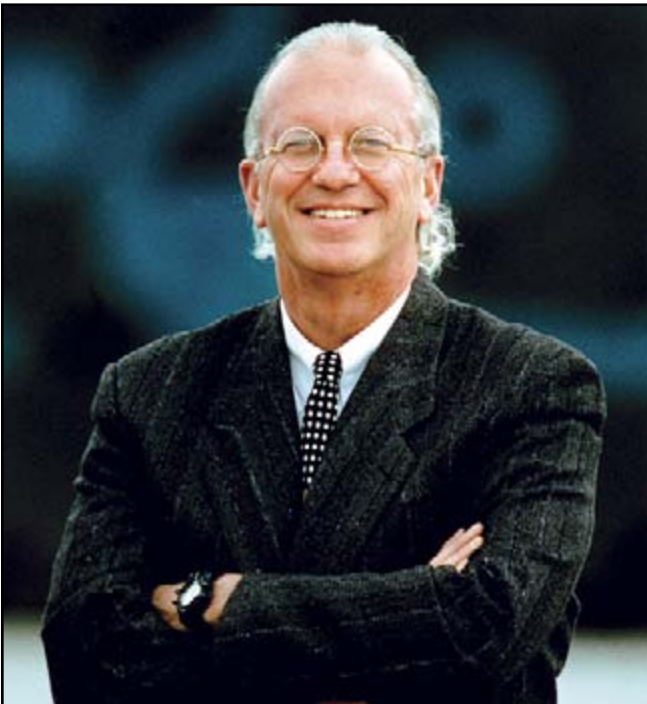
At the risk of institutionalizing Duncan Aviation's unique culture, we have taken this feedback and put together what we call our company promise. We have done this in order to talk about customer care throughout all levels of the organization. Our promise is a summation of what we do and why we have been in the business of business aviation for nearly 50 years. The promise follows:

Duncan Aviation promises to bring an experience unlike any other to owners and operators of business aircraft. We accomplish this by being a knowledgeable friend who cares enough to provide personal guidance, innovative services and ongoing support.

So what is my objective in sharing this promise with you? It is simply to let you know that our commitment to service is based on developing long-term relationships and that our customers and their high expectations are what drive us every day.

Although you may never again see our promise in writing, I guarantee that if you visit one of our service facilities, you will feel it in the spirit and drive of everyone with whom you come into contact. As a result, you will leave having had an experience unlike any other.

J. Robert Duncan, Chairman



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 Battle Creek, Michigan | 269.969.8400 | 800.525.2376
 Lincoln, Nebraska | 402.475.2611 | 800.228.4277

www.DuncanAviation.com

AVPAC Is Now Parts Support Services

Duncan Aviation's AVPAC (the Aviation Parts and Components network) has changed its name to Duncan Aviation Parts Support Services. The change was made so customers can more readily identify its services and to tie it more closely with Duncan Aviation.

Duncan Aviation Parts Support Services will still have the same experienced technical sales team, with a few additions. With more than 250 cumulative years of experience at locating hard-to-find parts at reasonable prices, Duncan Aviation Parts Support Services will still be the best option for reducing costs while searching for rotatable, avionic and jet aircraft parts. In addition to parts sales, Parts Support Services will continue to offer their consignment program, which has helped provide operators with an avenue to sell new, spare parts for nearly two decades.

Parts Support Services Welcomes Two More Parts Experts

Duncan Aviation's Parts Support Services is pleased to announce that Darrell Cermak and Mike Mettscher have joined the team. Darrell is the newest Technical



Darrell Cermak



Mike Mettscher

Sales & Support representative, specializing in Hawker and Falcon rotatables. Darrell's career with Duncan Aviation began in 1995 and he has an extensive background in Raytheon products. Mike is the newest Parts Sales representative. He began his Duncan Aviation career in 1998 and has a wealth of knowledge about TCAS, RVSM and entertainment systems. To reach them, call Parts Support Services at 800.228.1836 or 402.475.2611.

Duncan Aviation RVSM Solutions In Demand

Duncan Aviation's list of RVSM solutions covers much of the business jet market and includes the following:

- Astra/SP
- Challenger 600-1A11
- Falcon 10
- Falcon 50
- Gulfstream II
- Hawker 700A
- Learjet 31
- Westwind 1124
- Westwind 1124A

Duncan Aviation can also complete RVSM SBs for several corporate aircraft including the following:

- Citation 500 series, Citation 550, 560 and 650
- Falcon 20, 200 and 900
- Hawker 800, and 800/XP/1000
- Learjet 31A, 35, 35A, 55 and 60

Duncan Aviation Completes First Honeywell RAAS STC Approval and Installation

Duncan Aviation performed the first installation and STC approval for Honeywell's new Runway Awareness and Advisory System (RAAS). Duncan Aviation's facility in Battle Creek, Michigan, performed the RAAS installation and STC certification on a Gulfstream GIV.

Honeywell's RAAS provides improved situational awareness. Using GPS data, RAAS issues advisories based on aircraft position when compared to airport location maps stored in the EGPWS Runway Database.

Todd Duncan, Grandson of Founder Donald, Named Duncan Aviation Vice Chairman

Todd Duncan, grandson of Duncan Aviation founder Donald Duncan, was recently named Vice Chairman. In this position, Todd will assist his father, Chairman Robert Duncan, with the long-term strategic direction of the company by participating more in customer, vendor and industry activities.



"We are pleased to have Todd accept this responsibility," Robert Duncan says. "Todd's commitment to the future success and direction of the company will ensure the continuation of Duncan Aviation's legacy of innovation, stability and customer service. Sustaining and building on the values that my father began is what will enable Duncan Aviation to get better and better. Those values include respecting everyone—employees, vendors and customers—by being fair and telling the truth in all instances."

Todd has been involved with Duncan Aviation for 16 years, working in various areas including aircraft sales, line services and avionics. Having grown up around business aviation, Todd is an active pilot with multiple proficiency ratings. He has a business degree from Nebraska Wesleyan University. In addition to his Vice Chairman role, he will continue in his day-to-day role as President of Duncan Aviation's Avionics/Instrument and Accessory services.

"I am proud to accept this additional responsibility," Todd Duncan says. "At Duncan Aviation, when we make reference to the company as a 'family business,' that is meant to include not only the Duncan family but also our customers, our team members, their families and all of our business partners. I take the stewardship of this great company and the preservation of its reputation very seriously and look forward to playing a key role in our extremely bright future."



This March, *Professional Pilot* magazine announced the results of its latest independent reader poll, the 2004 PRASE (Preferences in Aviation Services and Equipment) Survey.

Duncan Aviation swept the top three spots in the "Best Avionics Center" category with Duncan Aviation's Lincoln facility named #1, Duncan Aviation's Battle Creek facility named #2 and Duncan Aviation's Teterboro facility named #3. Duncan Aviation has received a first-place avionics ranking every year since the survey began in 1985.

In the category of "Best Maintenance Center," Duncan Aviation-Lincoln placed #1 and Duncan Aviation-Battle Creek placed #5. Duncan Aviation has received a #1 rank every year except one since this portion of the survey began in 1987. (In 1988, Duncan Aviation was ranked second instead of first.)

BEST Avionics Center	#1 Duncan Aviation Lincoln	#2 Duncan Aviation Battle Creek	#3 Duncan Aviation Teterboro	DUNCAN AVIATION 	BEST Maintenance Center	#1 Duncan Aviation Lincoln	#5 Duncan Aviation Battle Creek
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Duncan Aviation Introduces Custom Jet Select, a Full-Service Acquisition and Refurbishment Program for First-Time Jet Buyers

You may be familiar with **JetResources**, Duncan Aviation's proven business aircraft acquisition service started in 1992. We provide buyers access to our market knowledge, professional guidance and resource network. With this service, our acquisition experts identify aircraft that best fit the customers' needs and guide them through negotiation, pre-purchase evaluation and closing. Duncan Aviation is the largest independent business aircraft service provider and in many cases is the first to be aware of soon-to-market aircraft.

Building upon the success of Duncan Aviation's **JetResources** service and responding to customer feedback, Duncan Aviation is adding an integrated business jet acquisition and refurbishment program called **Custom Jet Select** to our popular **JetResources** program. Our experienced team will assist first-time jet buyers in selecting and acquiring a high-quality modern business jet at an attractive pre-owned purchase price. We will then add significant value to the aircraft by installing a first-class custom interior, new safety-of-flight cockpit electronics and a beautiful exterior finish. This high-value solution will look and perform like new while offering the financial advantages of a pre-owned purchase price and excellent resale value retention.

Duncan Aviation can help you determine if purchasing a customized, modern pre-owned business jet is right for you. For more information or a detailed financial comparison and market analysis with the information you need to make a smart aircraft purchase decision, contact Andy Biller at 800.228.4277, ext. 1604, or e-mail him at Andy.Biller@DuncanAviation.com.

For more information about how our traditional **JetResources** service can help you with the purchase of a pre-owned business jet, contact the Aircraft Marketing Department at 800.228.4277 or 402.475.2611.

Duncan Aviation Earns AirCell Dealer of the Year

Duncan Aviation was recently named 2003 Sales Dealer of the Year by AirCell. AirCell commends Duncan Aviation on their excellent avionics department and high commitment to customer service. AirCell designs, manufactures, markets and supports a full product line of airborne cellular and satellite telecommunications systems.



Duncan Aviation's Dave Pleskac (center) accepts AirCell's Dealer of the Year award.

Duncan Aviation Welcomes Gerry Riffle to CF34 / ALF502 & APU Service Sales

Duncan Aviation is pleased to announce the addition of Gerry Riffle to its engine service sales team. Riffle will



concentrate his efforts on CF34 & ALF502 engines to further focus on the goals of Duncan Aviation's Challenger program. In addition, Riffle will increase awareness of Duncan Aviation's APU program.

Riffle is no stranger to Duncan Aviation or the aviation industry. Prior to joining Duncan Aviation in 1999 as the Engine Shop Manager, Riffle worked for K-C Aviation

for 15 years, focusing on the CF34 engine. 2004 begins Riffle's 44th year in the aviation industry with an impressive career history: 28 years as a technician, two years as an aviation maintenance instructor and 20+ years as a manager.

Second Edition Straight Talk About RVSM

Duncan Aviation has published an updated version of its *Straight Talk About RVSM* booklet. The document, which provides straight answers to the most-asked questions from operators, can be downloaded by visiting www.DuncanAviation.com and selecting *Straight Talk Books* from the list under *News & Publications* or e-mail RVSM@DuncanAviation.com.

Duncan Aviation Named Max-Viz Enhanced Vision System Dealer

Duncan Aviation was recently welcomed by Max-Viz as an authorized dealer for their Enhanced Vision System products. Duncan Aviation installed the first system on a Challenger 601 in December of 2003.

The EVS-1000 is the world's smallest and lightest Enhanced Vision System. It enables pilots to "see through" conditions of poor visibility such as haze, smoke, snow, rain, and the darkness of night, all of which reduce a pilot's ability to see the outside environment.

EVS-1000 is currently certified and available for Bombardier Challenger CL-600, CL-601 and CL-604 and Dassault Falcon 50 and 50EX. Certifications are near completion for Dassault Falcon 900A, B, C and EX, Gulfstream G-IV and G-IVSP, Sikorsky S-76A, B and C, Bell 212 and 412 and Bombardier Global Express.

Duncan Aviation Becomes Michelin Authorized Tire Service Center

Duncan Aviation is now a Michelin Authorized Tire Service Center. In addition to offering customers quality Michelin aircraft tires, Duncan Aviation may now perform any warranty work and handle any concerns customers may have with respect to Michelin aircraft tires. Duncan Aviation's trained staff of professionals can also provide valuable advice on the operation, care and maintenance of Michelin aircraft tires.

Embraer Legacy With Duncan Aviation Cabinets Delivers

The first Legacy (Embraer's new super mid-size corporate jet) with Duncan Aviation cabinetry was delivered in January.

Duncan Aviation's engineers collaborated with engineers from Embraer to certify and produce production drawings for the Legacy cabinets. Duncan Aviation craftsmen use these drawings to fabricate, assemble and finish the cabinets, which are installed in the Legacy by Embraer's technicians.

Duncan Aviation was awarded the Legacy cabinet contract in 2002. Since then, Duncan Aviation engineers have worked side by side with Embraer engineers in Embraer's West Palm Beach, FL, facility to develop solid models and production drawings. Duncan Aviation's engineers produced Catia CAD drawings to create digital models of the cabinets to ensure every piece fit and functioned perfectly before any materials were cut. The Catia CAD data was also used to create solid models of the cabinets for structural analysis and testing. Duncan Aviation's CNC (Computer Numeric Controlled) cutting machine uses this CAD information to cut the pieces to exact tolerances. Duncan Aviation frequently employs this process to deliver quick turntimes and unmatched quality, trademarks of Duncan Aviation's interior program.

"We are extremely pleased to be chosen by Embraer for production of Legacy cabinets," says Aaron Hilkemann, president of Duncan Aviation. "The collaboration of Embraer's engineers with ours has been a resounding success and an exciting addition to our successes with other OEM interior programs."

"Embraer's reputation for producing a strong and reliable airframe platform partnered with the quality and beauty of Duncan Aviation's interiors, is a marvel inside and out," says John Slieter, Duncan Aviation VP of Completions and Modifications.

New Look for www.DuncanAviation.com

Based on customer feedback and requests, Duncan Aviation's website was recently updated and redesigned to make airframe-specific content easier to find.

For aircraft-specific information, place your mouse over the words "My aircraft is. . ." in the bar on the left and a menu of Duncan Aviation's core aircraft will drop down. Select your aircraft from this list to view the capabilities Duncan Aviation has for that airframe.

Also look this summer for additional features including an aircraft completion photo gallery.



Duncan Aviation Hawker 400XP Service Center

Raytheon recently named Duncan Aviation's Lincoln, Nebraska, facility as an authorized service center for Hawker 400XP / Beechjet aircraft. This designation authorizes Duncan Aviation to complete all Hawker 400XP maintenance events including warranty issues.

The 400XP authorization is a natural progression of the Hawker tradition at Duncan Aviation. Duncan Aviation has full capabilities for all Hawker model aircraft including maintenance, engines/APU service, landing gear overhauls, paint and interior refurbishments.

Duncan Aviation Adds Burbank Satellite

Duncan Aviation is pleased to announce that it has added Burbank, CA, to its growing list of satellite avionics facilities. This Duncan Aviation avionics satellite is located at the Burbank Airport inside the Avjet facility at 4301 Empire Ave. It operates under Repair Station #YX2D335L. For more information about our Burbank location, contact Joe Onesto at 818.955.8413.

Duncan Aviation STCs

New STCs are constantly being issued to Duncan Aviation by the FAA. Most Duncan Aviation STC installations can be performed at any Duncan Aviation installation facility including Lincoln, Battle Creek, Teterboro, Van Nuys, Dallas/Ft. Worth, Denver and Las Vegas. Here are some of the most recent additions to our STC list.

Challenger 600-1A11 — RVSM Group Certification
Duncan Aviation recently received group certification for RVSM in the CL- 600-1A11. Duncan Aviation's solution utilizes an IS&S altimetry system, chosen because it meets all the RVSM tolerance requirements and customer requests for a substantially less expensive RVSM solution.

Citation X — TT-5000 Aero-I
Duncan Aviation recently earned an STC for the installation of a TT-5000 Aero-I Telecommunication System in a Cessna Citation X. The STC allows Duncan Aviation to install this system and the antenna in the Citation X.

Citation 525 — Proline 21
Duncan Aviation recently certified and installed the Collins Proline 21 Radio Package in a Cessna 525. The installation included dual COMMS, NAVS, Marker Beacons, Glideslopes, ADFs, DMEs, TXPs and RTUs.

Falcon 900EX — Rockwell Collins SAT-906 SATCOM Dual Channel HSD
Duncan Aviation has successfully performed the first installation of Rockwell Collins' dual channel HST-900 transceivers with Rockwell Collins' SAT-906 SATCOM system. This Falcon 900EX is the first business aircraft in the world to have simultaneous INMARSAT Aero channels and dual Swift64 high-speed data (HSD) channels. The Collins HST-900 empowers passengers with up to six voice channels and two digital channels providing quality voice and enhanced e-mail and internet access with data rates up to 128Kbs.

Gulfstream II and IIB — RVSM
Duncan Aviation recently certified an RVSM compliant solution for the Gulfstream II and Gulfstream IIB.

Gulfstream IV — RAAS (Runway Awareness and Advisory System)
Duncan Aviation performed the first installation and STC approval for Honeywell's new Runway Awareness and Advisory System (RAAS). The installation and STC certification was on a Gulfstream GIV.

IAI 1125 — Universal TAWS
Duncan Aviation recently installed and certified the Universal TAWS system in an IAI 1125. The system was installed to display on the UNS-1C+ system.

Learjet 35A — Honeywell Mark VIII EGPWS
Duncan Aviation recently installed and certified the Honeywell Mark VIII EGPWS in a Learjet 35A.



Westwind I and II – RVSM
Duncan Aviation recently certified RVSM compliant solutions for the Westwind I and Westwind II.

Duncan Aviation Rapid Response in Florida

Duncan Aviation's newest Rapid Reponse team is based in Fort Lauderdale, FL. Created specifically for road trips, Duncan Aviation's Rapid Response teams can be accessed 24/7 and specialize in service of TFE731 and CF34 engines as well as APUs. Convenient locations in Chicago, Denver, Dallas and now Fort Lauderdale ensure that technicians can arrive at a customer's location quickly. All teams can be accessed at the Rapid Response hotline at 877.522.0111.

Duncan Aviation Named to FORTUNE Magazine's 2004 List of the "100 Best Companies to Work For in America."

Duncan Aviation was named one of the "100 Best Companies to Work For in America" by FORTUNE magazine for the fourth year in a row, placing #77 on the 2004 list that was published in the Jan. 12, 2004, edition of FORTUNE. This is the seventh year FORTUNE has compiled the list with assistance from best-selling authors Robert Levering and Milton Moskowitz, and the fourth straight year that Duncan Aviation has been included.

Avionics, Instruments, Accessories and Parts Experience = Expertise



Duncan Aviation's avionics, instrument and accessory overhaul and repair capabilities can have an exponential effect on your aircraft's usefulness. We offer one-day turns, AOG services, **free loaners**, free 24-hour troubleshooting, five dedicated Technical Representatives, 10 Customer Account Representatives, a convenient network of satellite avionics facilities and excellent customer service.

In addition, our 13 aviation parts experts have access to Duncan Aviation's 300,000+ line item inventory. We can meet your business aircraft part needs for rotables, avionics, instruments and components, managed inventory, locator services, consignments and appraisals. We can even drop-ship your parts so you have them as quickly as possible.

When you need to repair your next avionics, instrument or accessory unit, ship it to Duncan Aviation. And when you're looking for parts support, call Duncan Aviation. We'll give you options on every side.

For AVIONICS, INSTRUMENT or ACCESSORY SERVICE, please call 800.LOANERS (562.6377) or 402.475.2611.

For PARTS SUPPORT SERVICES, call 800.228.1836 or 402.475.4125.

You can also find us online at DuncanComponents.com and DuncanAviationParts.com.



DUNCAN AVIATION
Experience. Unlike any other.

Avionics Repair

Instrument Repair

Accessory Repair

Avionics Overhaul

Instrument Overhaul

Accessory Overhaul

Avionics Parts

Airframe Parts

Engine Parts

Rotables

Consumables

Hard-To-Find Parts

Parts Locator Services



CREATING A
COMFORTABLE
INVESTMENT

Aircraft transformation is our business and for this customer it was more than a radical update, it was a brilliant investment.

It all started with a simple phone call almost a year ago. The call was from a chief pilot looking to solve some problems in his aircraft's interior, give it a new coat of paint and invest in a "new cockpit" during a maintenance event. After considering all of the possibilities, the decision was made to go for all the options — complete paint, a new and reconfigured interior, the added safety and upgradeability of the Pro Line 21 Continuum avionics package, engine overhaul and an inspection — and he needed it all within a 16-week turntime. A primary request from the owner was



team solved storage problems with unique mid-cabin curved cabinet designs that incorporate Lexan doors, a microwave oven, a pull-out work surface, wine storage, catering drawer and an ice drawer. We also added a pop-up 15" flat-screen monitor, fax machine, divided office supply storage, a liquor storage drawer and two large drawers with moveable dividers. A Duncan Design Collection curved vanity

a different seating solution throughout the aircraft. We replaced a notoriously uncomfortable barrel chair with a light-weight, fully mobile executive chair. Next, the unusual left-hand forward divan was replaced with a club seating configuration, which we mirrored on the right-hand side of the aircraft. The result is a comfortable, nine-passenger cabin configuration.

Two Duncan Design Collection items, a curved armledge and a curved table design, inspired the new cabinetry. For these, the owner selected an exotic and rare species of Birdseye Cherry veneer. The Duncan Design

was installed in the forward lavatory and new Satin Almond Gold-plated oval paddle latches were incorporated throughout the aircraft. The Duncan Aviation fabrication team built a new water tank and installed a coffee maker/espresso machine in a curved, pull-out work surface.

The Duncan Design Collection PSU offers more headroom than the OEM solution. It also delivers LED up-wash and downwash lighting and a sleek housing for low-profile lights and gaspers. The PSU panels wrap the aft section of the aircraft and contain aft bulkhead accent lighting. This innovative

Enjoy the Tax Benefits of Investing in Your Aircraft

The tax depreciation benefits on new aircraft and capital equipment for aircraft have been accelerated once again. Under the Modified Accelerated Cost Recovery Systems (MACRS) aircraft owners may recover 100% of capital upgrade costs such as engines, paint and interior refurbishment and avionics packages through depreciation deductions.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 increases first year depreciation deduction from 30% to 50%. To qualify, property must be "qualified property" as defined by the Job Creation and Worker Assistance Act of 2002 and must be placed in

service between May 5, 2003, and January 1, 2005. This is a significant tax benefit for aircraft owners considering these modifications or an aircraft purchase.

Example:
If an aircraft owner spent \$2 million improving their aircraft in 2004, he could claim a \$1 million depreciation deduction on his 2004 tax statement.

Please consult your tax consultant for guidance concerning this benefit.


PSU uses the same user-friendly, quick release catches and hinges employed in our Lear 35 Silhouette Headliner. This proven system allows a single user to easily access hidden components.

The Falcon maintenance team found corrosion during the inspection. Repairing this corrosion required the removal of the wings, but the extensively experienced team made the repairs and put it all together again without significantly extending the downtime.

The avionics install team installed the Rockwell Collins Pro Line 21 Continuum avionics package. The Director of Operations chose the Pro Line 21 as the solution to the ever-evolving upgrade requirements and to equip the cockpit with the latest in situational awareness. The sharpness of the large displays and the advanced capabilities of the Integrated Flight Information System (IFIS) equipment were important factors in his decision. This retrofit required the removal of over 300 pounds of wiring, and the fabrication of a new instrument panel and avionics rack. The result is a flight deck with the

latest digital technology. In addition, the Pro Line 21 is a product that has proven the rare ability to retain its full value in the market.

Duncan Aviation's Falcon teams have seen it all and their combined experience benefits those who trust them with their Falcon. In addition to experience, excellent communication, coordination and teamwork between every involved department were key elements in the success of this multi-shop project. All elements of the workscope took place simultaneously, saving money and time.

From the initial phone call to its return to service, the innovative solutions used in this transformation resulted in a better functioning, safer, more attractive and more valuable aircraft. If you are in need of these benefits, there has never been a better time to add value to your aircraft. 



It's much more than pretty. The bright and accurate information delivered by this Pro Line 21 raises situational awareness to a new level. Wiring removed for the installation filled two trashcans and totalled a whopping 300 pounds! The installation also involved the creation of a new instrument panel and avionics rack that were created by our fabrication team.





"I first contacted Duncan Aviation for a quote because of their outstanding reputation. In the end, I chose them not only because of the thorough proposals and their ability to identify and resolve a long-standing and difficult discrepancy — it was more than that. The entire Duncan Aviation organization responded enthusiastically to my requests and I felt at home immediately.

The communication throughout the project was amazing. I maintained a full flight schedule during the entire project and communicated with the Project Manager primarily by e-mail. This communication along with digital photos, gave me real time visual and text descriptions of discrepancies and design changes. This greatly reduced my visits to the facility and increased my productivity and home time, the value of which is immeasurable to me.

As the project progressed, I observed genuine pride and excitement from everyone involved. Even technicians not directly involved in the project showed a high level of interest. It was obvious that the people at Duncan Aviation were passionate about their jobs.

From beginning to end I was very impressed with the capabilities and culture that exists at Duncan Aviation. This level of service is exactly what I was seeking. I would highly recommend Duncan Aviation to anyone considering a project of this magnitude."

*Don West
Chief Pilot*


Curved lines and accents became the dominant theme throughout the interior. Oxygen boxes and speakers were created to echo the shape and feel of other interior elements. The boxed oval shape repeats throughout the interior including upholstery designs, entertainment switches, cabinet faces, latches, the microwave oven and even the carpet.



One Spring Day...

Duncan Aviation is known throughout the aviation industry for high-quality, fast turntimes and top-notch customer service when it comes to repair and overhaul services for avionics and instrument units. That's why Duncan Aviation has placed #1 in the *Professional Pilot* magazine's list of the best avionics shops in the United States for the last 20 years . . . and why our Lincoln, Battle Creek and Teterboro shops have swept this list with the three top positions for the last three years.

But did you know that we also provide the same high-quality service when it comes to accessory repair/overhaul and parts support?

The goal at Duncan Aviation has always been to provide value for our customers. At Duncan Aviation, value means providing the "behind-the-scenes" support that many other facilities don't even offer. To help put our capabilities and experience in perspective, we decided to take a typical day and record the activity of our avionics/instrument, accessory and parts support areas. We chose the "Ides of March"—March 15, 2004. Statistics from that day are listed at the right. 



Duncan Aviation is well-known for its avionics send-in work. Duncan Aviation's growing Accessory Shop (shown above) does for accessory components what our Avionics Shop does for avionics units. We provide around-the-clock, free technical support, exchange units and fast AOG services. Our Parts Support Services team also provides technical information regarding parts and can locate even the most hard-to-find parts.

Facts & Figures

(From March 15, 2004)

AVIONICS

(#1 rated service since 1985)

755 calls to our Avionics Tech Reps at 800.LOANERS

121 avionics units received

88 avionics units repaired and shipped

33 loaners sent

15 one-day turns accomplished

SATELLITES

(Our satellite network brings our top-rated service to your doorstep.)

21 shops located throughout North America

ACCESSORIES

(AOG weekend service 10 a.m. to 10 p.m.)

50 total units repaired

13 electronic components repaired

10 pneumatic components repaired

9 hydraulic units repaired

8 electrical components repaired

2 Accessory Tech Reps on-call 24/7

PARTS SUPPORT SERVICES

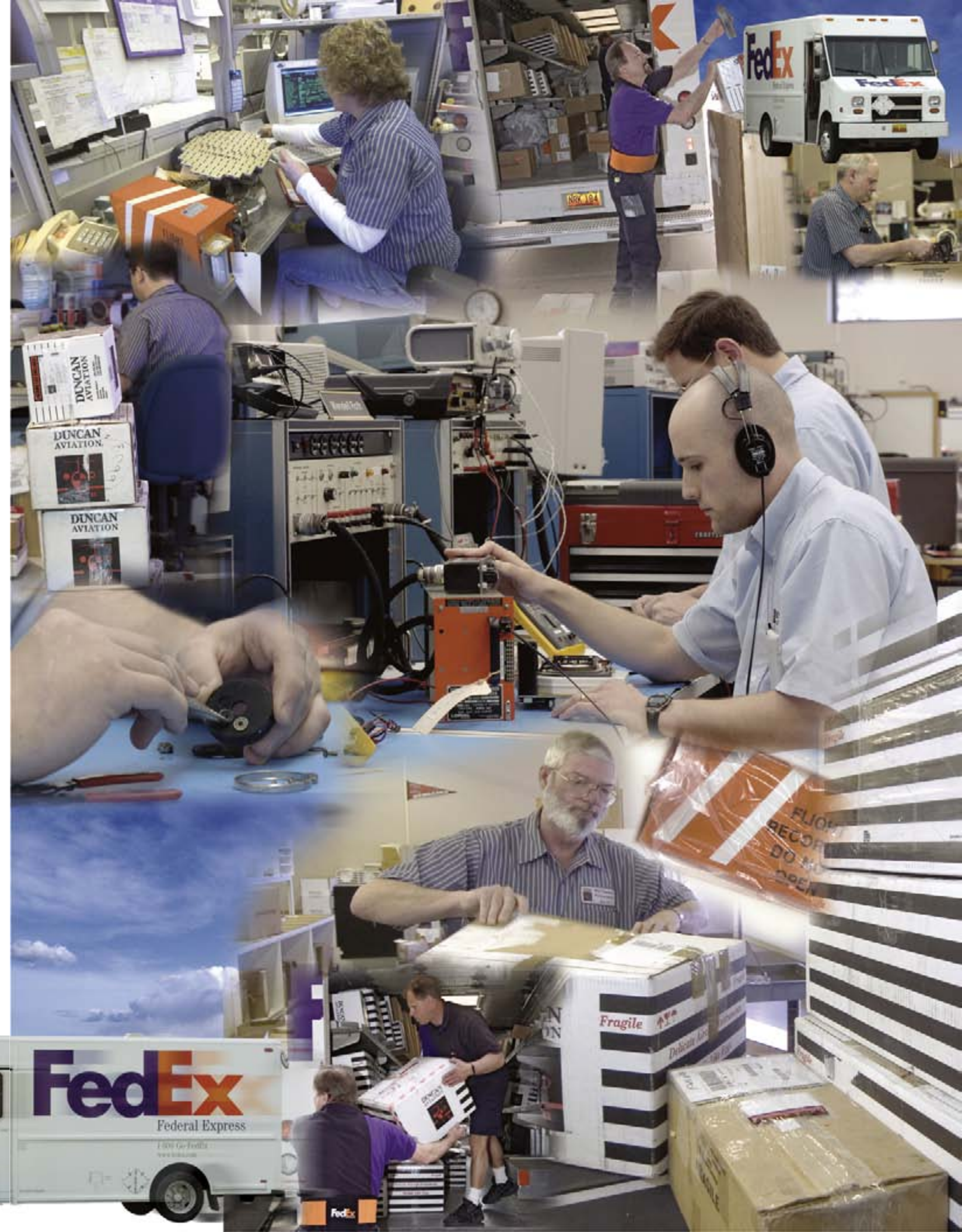
(Avionics and rotatable exchanges available 24/7.)

243 calls received

136 general parts shipped

16 AOG situations satisfied

16 countries as parts destinations





There is a Difference

TFE731 Authorizations

Honeywell TFE731 Authorized Engine Service:
TFE731 Major -2 through -5 and 20/40/60

Factory Authorized Maintenance Service Plan (MSP):
MSP and MSP Gold

Additional Service Contract:
JSSI

We have long believed that if operators could witness our unique company culture, they would choose us for all projects.

Our Experience

Duncan Aviation has been a Honeywell authorized Major Service Center for nearly 25 years. That makes us one of the most experienced TFE731 centers of excellence in existence. *Experience counts.*

Our Capabilities

Our Honeywell Major Service Center authorization includes TFE731-2/3/4/5 and the new generation TFE731-20/40/60 engines. We have invested in every piece of equipment available to a Major Service Center to maintain the TFE731 engine and we are factory authorized to perform all MSP work. *There are no shortcuts to quality.*

Our People

Duncan Aviation hires professionals who are dedicated and enthusiastic about aviation.

Our culture ensures all technicians have opportunities to continuously expand their technical expertise, grow personally and develop leadership skills. Our management's open style encourages feedback and provides a sense of belonging to something bigger than just an individual effort. This helps ensure that our employees are happy and ultimately stay, because all the training in the world doesn't mean much if the technicians leave. This is exemplified by the fact that Duncan Aviation has been listed in FORTUNE Magazine's "100 Best Companies to Work For" list for the past four years!

Duncan Aviation has the experience, the capabilities and the people that will make a difference for your next event. Call for a quote or visit our Engine Service Center and see the difference for yourself.

Call Jon Dodson, Mike Healzer or Doug Alleman at 800.228.4277 today.

Plan Ahead For APU Maintenance

Many corporate flight departments spend significant time planning for maintenance, but the Auxiliary Power Unit (APU) can still be an item that sneaks up on you. While the APU may seem like a small item, it can have a large impact on your budget and mission availability.

Trust Experience

As with other aircraft components, APU maintenance is best left in the hands of experts. Our team is led by John Kennedy, technical representative and APU specialist. John has more than 10 years of dedicated APU experience and is your absolute source for technical advice and troubleshooting assistance.

Installing Confidence

Duncan Aviation's APU team can troubleshoot, repair and perform hot section inspections on both Honeywell and Sundstrand APUs. Our in-house APU run stand provides the ability to troubleshoot the

APU outside of the aircraft and do performance functional testing and leak checks prior to reinstallation. This means no guesswork or wasted time to install an APU that will not perform. Duncan Aviation's run stand is capable of running all Honeywell and Sundstrand APU models.

Control Cost

Coordinating maintenance to coincide with an upcoming airframe inspection, engine maintenance, interior refurbishment, avionics installation and paint means no additional downtime for APU work resulting in lower cost and reduced turntimes.

You Decide

APU maintenance and performance checks can be done at Duncan Aviation's full-service facilities in Lincoln, Nebraska, or Battle Creek, Michigan. Another option is to have our technicians come to your facility for maintenance or you can remove the APU and send it to Duncan Aviation. Whichever way you choose, performance is guaranteed.

Contact Us

For a quote on your next event, call the APU experts at Duncan Aviation: Gerry Riffle, Jon Dodson, Mike Healzer or Doug Alleman at 800.228.4277.



APU Authorizations

Honeywell:

All maintenance up to and including Hot Section Inspections on models: GTCP30-92, 36-6, 36-100 series, 36-150 series, RE100 and RE220.

Sundstrand:

All maintenance up to and including Hot Section Inspections on models: T-62T-39 and T-62T-40 series.

Duncan Aviation owns an APU run stand that provides us with the ability to troubleshoot APUs outside of the aircraft and do performance functional testing and leak checks prior to reinstallation. John Kennedy and Jim Covert are shown in the photo on the far left running a Honeywell GTCP36-100E. On the immediate left is a more detailed shot of Jim performing an APU test run.

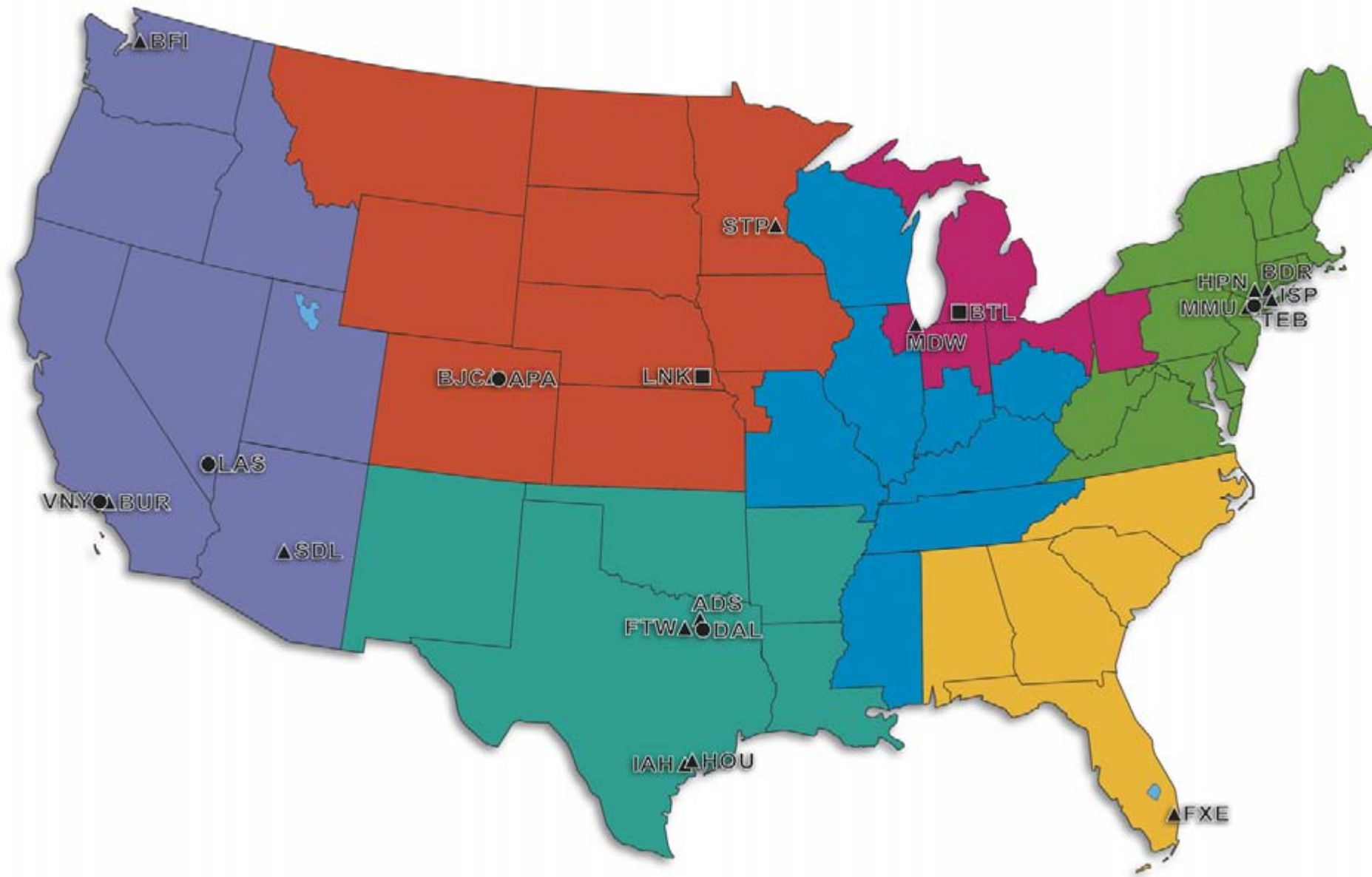
*The services
you need.*

*The quality
you want.*


*All within
easy reach.*


Duncan Aviation has created a network of easy-to-reach facilities and contacts for owners and operators of business aircraft. In addition to our two full-service support facilities in Lincoln, Nebraska, and Battle Creek, Michigan, Duncan Aviation has the following people and locations to assist you with capability information and close-to-home or in-the-field/AOG repairs:


-  **Five Avionics Installation and Line facilities**
-  **16 Avionics Line facilities**
-  **Seven Regional Service Marketing Representatives**
-  **Rapid Response launch facilities for in-the-field engine repairs**




REGIONAL MANAGERS


WESTERN U.S.
 **Tony Yeary**
 Phone: 480.641.3196
 Fax: 480.641.2211
 Cellular: 602.363.4456


SOUTH CENTRAL U.S.
 **Dennis Brewer**
 Phone: 817.472.6113
 Fax: 817.472.0709
 Cellular: 817.247.1067

NORTH CENTRAL U.S.
 **Kevin McGinn**
 Phone: 402.479.1677
 Fax: 402.479.4213
 Cellular: 402.430.7303

CENTRAL U.S.
 **Dave Loudenback**
 Phone: 618.467.1802
 Fax: 618.467.1804
 Cellular: 618.973.5926

GREAT LAKES
 **Rick Randall**
 Phone: 269.969.8468
 Fax: 269.969.8489
 Cellular: 269.317.7098



NORTH EAST U.S.
 **Bob Brega**
 Phone: 570.894.4955
 Fax: 570.894.4365
 Cellular: 570.807.6383

SOUTH EAST U.S.
 **Pete Alves**
 Phone: 561.798.1251
 Fax: 561.333.5813
 Cellular: 561.236.5010

FULL SERVICE & SUPPORT FACILITIES

 Complete Service Facilities	LNK	Lincoln, Nebraska	800.228.4277	BTL	Battle Creek, Michigan	800.525.2376
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SATELLITE FACILITIES

 Avionics Install/Line Facilities	APA	Denver, Colorado	303.649.1790	BUR	Burbank, California	818.955.8413
	DAL	Dallas, Texas	214.352.3468	FTW	Ft. Worth, Texas	214.352.3468
	LAS	Las Vegas, Nevada	702.262.6142	FXE	Ft. Lauderdale, Florida	954.771.6007
	TEB	Teterboro, New Jersey	201.288.1550	HOU	Houston, Texas	713.644.0352
	VNY	Van Nuys, California	818.902.9961	HPN	White Plains, New York	914.686.8294
 Avionics Line Facilities	IAH	Bush Intercontinental, Texas	713.644.0352	ISP	Long Island, New York	631.981.1080
	ADS	Addison, Texas	214.352.3468	MDW	Chicago, Illinois	773.284.4600
	BDR	Bridgeport, Connecticut	914.686.8294	MMU	Morristown, New Jersey	973.326.1110
	BFI	Seattle, Washington	206.764.3962	SDL	Scottsdale, Arizona	480.922.3575
	BJC	Broomfield, Colorado	303.410.7053	STP	St. Paul, Minnesota	651.209.8430

RAPID RESPONSE

24/7 In-Field AOG Services	All Locations — Airframe, Engine & APU	877.522.0111
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Duncan Aviation Praised With Gulfstream Operator Comments

A Gulfstream Master Technician—Your Key To Confidence

Behind Duncan Aviation's successful Gulfstream program is technical representative and Gulfstream Master Technician Jim Overheul. In his position, Jim offers technical support to Duncan Aviation's Gulfstream teams as well as to our Gulfstream customers.



Jim has 20 years of aviation experience, most focused exclusively on Gulfstreams. Having this level of experience in-house is a huge benefit to customers. If an issue does arise, an expert doesn't have to be contacted because he is

already here. And if OEM assistance is required, Jim knows whom to contact to get answers—fast. This means projects can move through the facility with maximum efficiency.

A technical representative's position requires a 24/7/365 schedule. Accepting such a position requires much more than commitment. What does it do for Jim? Pride. In Jim's words, "There is a great deal of pride in knowing that I can support the Gulfstream fleet in a way that is second to no one else in the industry."

Duncan Aviation has the tooling, expertise and, most importantly, the people who will make a difference on your next project. For a comprehensive quote for your Gulfstream, contact Doug Donahue at 800.525.2376.

Did You Know . . . ?

Avionics install STCs reduce cost and downtime. Call Dennis DeCook at 800.525.2376 for information on the following:

- GII RVSM STC
- TAWS & EGPWS STCs
- TCAS II STCs

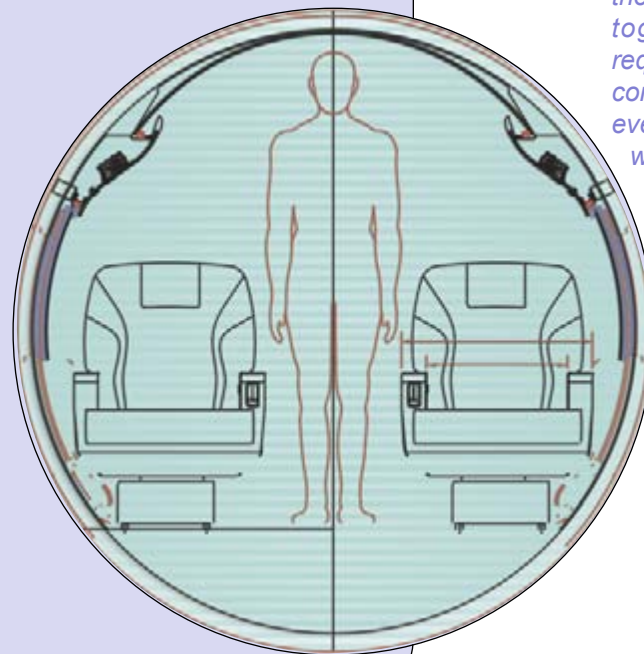
- GIV RAAS STC

Announcements of Honeywell's RAAS include:

- When the airplane is approaching a runway — either on the ground or from the air.
- When the airplane has entered and is aligned with a runway.
- When the runway is not long enough for the particular aircraft.
- The distance remaining to the end of the runway as the aircraft is landing or during a rejected takeoff.
- When the pilot inadvertently begins to take off from a taxiway.
- When an aircraft has been immobile on a runway for an extended time.

Duncan Design has developed proven designs specifically for Gulfstreams:

- Wide interior shell package
- Unique seat designs
- LED lighting solutions
- Sound-proofing
- S-Curve PSU
- Flush windowline monitor
- Curved cabinetry designs



Over the last several years, more and more Gulfstream operators have chosen Duncan Aviation for their maintenance, refurbishment and avionics update needs. With several other good service centers to choose from, other operators might wonder — "Why Duncan Aviation?"

Duncan Aviation's growing Gulfstream business is a result of our solid experience, capabilities and great customer service. Our experience includes many heavy maintenance projects (72 month and 5000 landing inspections) that have often been coupled with complete interior, cabinet and avionics upgrades. Of course, our paint capabilities are well known, too. Many Gulfstream operators choose Duncan Aviation because of our unique culture and work environment. Good things happen here.

Here are a few Gulfstream customer comments:

"We chose Duncan Aviation for our recent refurbishment project based primarily upon their demonstrated quality of workmanship together with acceptable downtime requirements. We also value the stability of the company, price, and overall capabilities in the event unexpected conditions are discovered. I was very impressed with the level of pre-planning that went into our project. . . I found the facilities to be clean and well-equipped, and the personnel to be motivated, professional, and capable of consistently meeting our requirements. The bottom line is the aircraft was delivered on time, and on budget, and we are very happy with the results."

— Mark Nelson, Chief of Maintenance, Aventis Pharmaceuticals


"We would like to express deep appreciation to Duncan Aviation for the recent work on our GII. Professionalism, thoroughness, positive attitudes and timeliness were exhibited greatly and are all appreciated by our company."

— Jeffrey T. Sharp, Chief Pilot, Park Place Entertainment



"At first, we were a bit concerned that we were not working with the OEM. Those concerns quickly vanished as the project progressed. All of the Duncan Aviation employees were knowledgeable, courteous and professional. Their 'can do' attitudes during the project's challenges kept it fairly painless."

— William Lemon, Chief of Maintenance, Schering-Plough

Find out for yourself why Duncan Aviation is the recognized leader in airframe maintenance, avionics installations and completions. 

GULFSTREAMS



"I had a positive experience. We added items to the list and Duncan Aviation still delivered the aircraft nine days early! All departments worked flawlessly together. Well done! I look forward to doing business with Duncan Aviation again."

— Rich Redmond,
DOM for Janus
Equities, Inc.

Exceeding Expectations

Duncan Aviation's Challenger teams know what it takes to exceed customers' expectations. And that is just the scenario that occurred with the recent 96 Month Airframe and Landing Gear inspection on a Challenger 604 operated by Hartford, CT's Janus Equities, Inc.

Upon arrival, our teams performed the required incoming runs and positioned the aircraft to begin accessing the areas required to complete the 96 Month inspection. Two days after arrival, the aircraft was totally accessed with the gear and its components removed and on the bench in our hydraulics lab, and the inspection phase of the 96 Month well underway.


The expected downtime for gear overhaul is three weeks. Duncan Aviation's in-house hydraulic lab was able to turn the 96 Month landing gear portion in only two weeks. This not only resulted in a shorter overall downtime for the aircraft, it reduced costs for the operator. This is just one example of this project's successes.

In reality, though, success began far earlier. Rich Redman, Director of Maintenance for Janus Equities, communicated with Duncan Aviation well in advance to

secure a schedule for the aircraft and identify all workscope details. With the plan firmly in hand, Duncan Aviation's teams were able to prepare so every minute the aircraft was in-house could be used efficiently.

"This was among the first 96 Month inspections in the fleet and our first. We knew we had the expertise to complete the inspection successfully, but it is gratifying to know we did even better than anticipated!" says Skip Laney, Challenger Services Sales Representative. "The total downtime was 5.5 weeks with the aircraft delivering nine days earlier than promised and below budget."

Mr. Redman summed up his visit to Duncan Aviation in these words, "I had a positive experience. We added items to the list and Duncan Aviation still delivered the aircraft nine days early! All departments worked flawlessly together. Well done! I look forward to doing business with Duncan Aviation again."

Knowing that we can exceed the expectations of Rich and other Challenger operators is our greatest reward. Trust your next event to Challenger experts. For a comprehensive quote, contact Skip Laney at 800.228.4277. 

Growing Challenger Engine / APU and Airframe Capabilities

New Opportunities

Duncan Aviation's Challenger program has advanced with the addition of Gerry Riffle as CF34/ALF502 engine and APU service sales representative and Scott Shefke as Challenger technical representative.

Formerly Duncan Aviation's engine shop manager, Gerry has more than 40 years of aviation experience. Before joining Duncan Aviation, he managed the CF34 engine line for K-C Aviation. Gerry will be an excellent resource for our Challenger engine and APU customers.



Gerry Riffle

As Challenger technical representative, Scott will provide troubleshooting and support for Challenger customers and our Challenger teams. Formerly, Scott was Duncan Aviation's Challenger team leader. He also serves on the Bombardier/Challenger Board of Advisors.



Scott Shefke

Growing Capabilities

General Electric CF34 Engine

All CF34 maintenance including routine periodic inspections, hot section inspections and overhaul support with major maintenance providers.

Honeywell ALF502 and AS907

Line service capabilities including routine inspections/checks, LRU troubleshooting and replacement, and coordination of heavy maintenance with major maintenance providers.

Sundstrand/Honeywell APU Capabilities

Factory authorized for Sundstrand and Honeywell model APUs including hot section inspections.



Did You Know... ?

New PSU Panel and Other Designs

Our recently revealed Duncan Design Collection offers a wide array of cabin upgrades including seat designs, fabrics, drinkrails and tables that melds award-winning design, maintenance-friendly engineering and unmatched aesthetic appeal. In addition, efficiency gains and inventory processes allow us to offer the Collection with quicker turntimes and greater value than ever before. Perhaps the crown jewel of the Collection is our redesigned PSU overlay panel that offers a modern design, makes PSU access a (literal) snap and delivers downwash and upwash lighting. Another unique offering is our S-Curve galley. It creates a jaw-dropping cabin entry while greatly increasing galley storage and functionality. Call 800.228.4277 today for more information about our groundbreaking Duncan Design Collection.

Affordable CL600 RVSM Solution

Are you looking for a more affordable CL600 RVSM solution? We have it! Our CL600 group certification is complete and we're closing in on one dozen CL600 RVSM installations.

Challenger Landing Gear

Duncan Aviation is factory approved to perform Challenger 600, 601 and 604 landing gear inspections. Duncan Aviation recently performed one of the first 96-month landing gear inspections on a CL604.

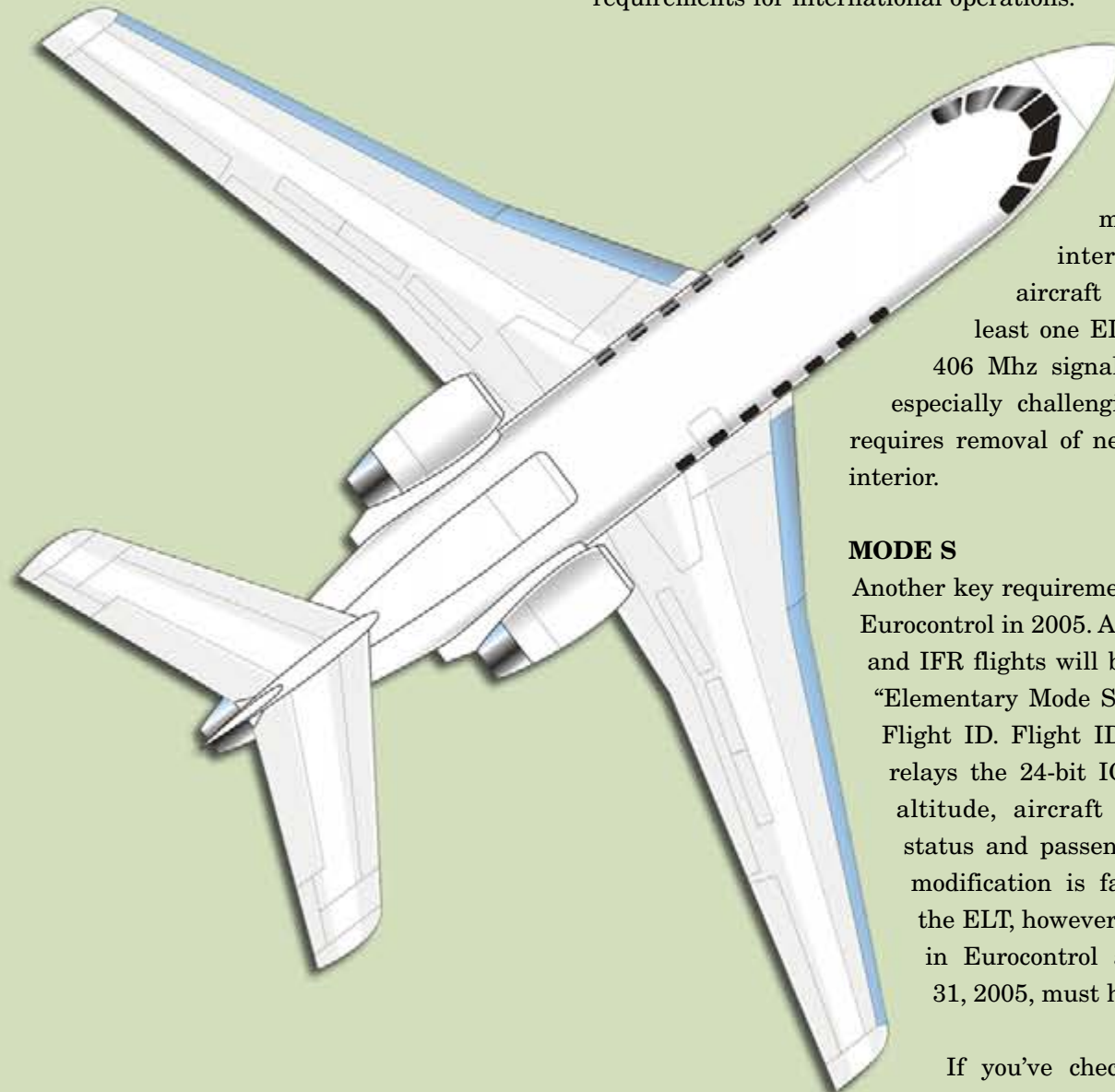
Avionics Offerings

Duncan Aviation capabilities include NAV/COM, radar, altimeter, transponder, flight director and overall avionics repair and overhaul. Use Technical Representative Dan Magnus' experience for free troubleshooting at 800.LOANERS.

Way to Go Falcons

We're Almost There!

We pause to applaud the Falcon fleet operators for the fine job they have done preparing for the upcoming RVSM and TAWS mandates. Though more than a few aircraft have yet to complete these modifications, Falcons, by far, lead the industry in aircraft prepared for these mandates. Having said that, it is important to remember a couple of lesser-known upcoming requirements for international operations.



ELT

The first of these is the March 2005 ICAO ELT mandate requiring all internationally operated aircraft be equipped with at least one ELT that transmits the 406 Mhz signal. This installation is especially challenging for Falcons as it requires removal of nearly the entire cabin interior.

MODE S

Another key requirement will be enforced by Eurocontrol in 2005. After that date, all VFR and IFR flights will be required to operate "Elementary Mode S," often referred to as Flight ID. Flight ID/Elementary Mode S relays the 24-bit ICAO aircraft address, altitude, aircraft identification, flight status and passenger information. This modification is far less involved than the ELT, however, all aircraft operating in Eurocontrol airspace after March 31, 2005, must have it.

If you've checked in to equipping your Falcon with Elementary Mode S, you have learned that Dassault has not yet issued a Service Bulletin for this installation. To meet the need in the meantime, Duncan Aviation has installed several Flight ID systems with field approval.

SAFETY ENHANCEMENTS

Beyond the mandates, many Falcon operators are installing systems that deliver safety. Two front-runners in this area are Honeywell's (Runway Awareness and Advisory System) RAAS and MaxViz's (Enhanced Vision System) EVS.

We have certified RAAS in a GIV and are awaiting an STC solution for other airframes. RAAS enhances situational awareness by making announcements, most in regard to the aircraft position in relation to the runway. (See page 30 for a list of RAAS features).

Continuing the safety discussion, MaxViz's EVS enhances visibility in low-visibility

environments. It does this with an infrared sensor and associated cockpit display. Duncan Aviation is proud to be an authorized MaxViz dealer; We have completed this installation in a Falcon 50 and have certification for other models.

To add safety and meet the mandates of every region required for your Falcon missions, call today. Dave Pleskac at 800.228.4277, or Clark Gordon at 800.525.2376, are ready to provide budgetary numbers and answer all your questions about these systems and their installations. Call today! ☐

Falcon Customer Confidence

Falcon aircraft are a familiar sight in our Dassault Factory Authorized facilities in Lincoln, Nebraska, and Battle Creek, Michigan. In the past three years, more than 500 Falcons have passed through our hangars! This level of volume creates experts.

In fact, Duncan Aviation is so confident in our Falcon experts that we now offer a fixed, out-the-door "C" inspection price. This new program is the first of its kind in the industry and available to select aircraft approaching "C" inspections. The fixed inspection price includes all discrepancies noted in the inspection process.

Another industry first is Duncan Aviation's "Turntime Guarantee." This written guarantee shows our commitment to delivering your aircraft on time, as promised. These programs represent Duncan Aviation's confidence in our service and our Falcon teams.

Accept nothing less than experts for your next maintenance event. For a comprehensive quote, contact Roger Courey or Jeff Manion. ☐

DID YOU KNOW?

- Crystal clear voice communication and true high-speed data is a reality. Call Clark Gordon today at 800.525.2376.
- Duncan Aviation has extensive capabilities on hydraulic components and control valves. Dozens of new capabilities are added every year.
- Duncan Aviation has provided avionics/instrument service, specializing in radar, for Falcons since the early '70s. Whether it's a Honeywell or Collins system, Curt Campbell can help and keep you on your schedule with a free loaner.
- We will soon introduce the newest Duncan Design Collection addition — the Falcon 50 headliner/PSU. Call to learn the many advantages of this system and be sure to look for it in our next Duncan Debrief.



Thinking RVSM? Think "Paint."

If you still need RVSM for your Citation, consider Duncan Aviation's experience advantage. Most of the Citations we have certified for RVSM operations in the last year have required new paint around the static ports. While paint chips and skin bumps are the best-known error inducers, we have found that paint stripe ridges, overly thick paint and rough paint finishes can adversely affect static port readings as well. For this reason, we prefer to paint the entire aircraft during RVSM certification.

We have reserved two paint slots in June that, if done in conjunction with RVSM, will be offered at 33% off the regular price. This exceptional offer is extended to all Citation models. Call George Bajo at 800.525.2376 and mention this article to get in on the program.

1,000 Citation Operators Know Our Citation Expertise

Some say, "Good experience is hard to find." That may be true in some cases, but not at Duncan Aviation. In the last 18 months, we have worked on more than 1,000 Citations across our locations, most with phase inspections, engine work, RVSM and TAWS installations and many with interior and/or exterior refurbishment.

Our recognition by *Professional Pilot* magazine readers as the #1 Maintenance Center and the #1 Avionics Facility for 20 years running is mirrored in the customer "thank you" letters we regularly receive. They tell us that our attitude, experience and efficiency are unsurpassed. Here is one example:

"I would like to express my thanks for a job well done. Our Citation was completed on time and on budget. The thing that impressed me most about our experience at Duncan Aviation was all the people that I came in contact with seemed truly interested in our project. They all took pride in their work and wanted us to be happy with the result. There are just too many good people to name. You can rest assured that when we again require this type of work, we will be back at Duncan Aviation."

– Raymond A. Hahn,
Director of Flight Operations,
Sierra Stellar Inc.

Duncan Aviation – The JT15D Leader



Ken Kuchenreuther, Duncan Aviation Engine Technical Representative and JT15-D expert, is available to help customers around the clock.

In a typical year, Duncan Aviation completes dozens of hot section inspections on JT15-Ds and provides overhaul support for dozens more.

Take this experience times 30 years and it is easy to see why Duncan Aviation is recognized as the leader in Citation engine service. In addition, Duncan Aviation has built strong relationships with Pratt & Whitney, Williams-Rolls and the major vendors authorized to participate in the overhaul and heavy maintenance of Citation engines. These relationships allow Duncan Aviation to work closely with the customer's vendor of choice to routinely reduce hot section and overhaul costs.

If you have an engine event approaching, trust the experts at Duncan Aviation. Contact Dan Arrick at 800.525.2376.

Did You Know . . . ?

Citation Operators Love the Duncan Design Citation III to VII Conversion
Citation III operators who have come to Duncan Aviation for our Citation VII interior conversion are happy with their investment. Call today to learn how radically this quick and affordable upgrade will transform your Citation III cabin.

We Are Citation Landing Gear Experts
We offer complete repair of landing gear components and servos. Our fast turntimes allow operators to send in units instead of buying exchange units.

We Have Loaners To Keep You Flying
Duncan Aviation has been repairing Citation avionics since 1981, specializing in Honeywell flight control and associated systems. Larry Troyer is an expert with Citation autopilot and gyro units and he can get you the right loaner to keep you flying.



The interior shown above not only won rave reviews from the customer, it also won First Place from the American Society of Interior Designers in the "Transportation Design" category.


CITATION



Our 1125 Interior

Behold Duncan Aviation's G100 interior as it appears in a recently retrofitted 1125. Though it has been modified slightly from the original, it is in essence the same interior we designed and STC'd for the SPX program.

While it is well known that we built and installed this kit in almost every SPX, many do not know that we continue to build this interior for installation in every new G100 that rolls off the line.

Design forethought allows this interior, with minimal modifications, to be used as a complete retrofit for the Westwind I and II as well as the Astra, SP and SPX. In addition, sections of the interior can be used to update only the galley, drinkrails, tables or other areas of the cabin if the operator doesn't want to install the complete interior. Proper planning allows Duncan Aviation to transform an Astra, Westwind or G100 with the complete interior in seven weeks. 



Fuel is Expensive and Dangerous. If You Have Leaks, Trust the Experts at Duncan Aviation.

Many facilities believe the answer to a fuel leak is another layer of sealant. Duncan Aviation Fuel Team Leader Marvin Kadavy has seen aircraft that have required more than 100 hours just to remove layers of old sealant before repairs could begin. With that kind of prep time, it's obvious that repairing such aircraft means a longer downtime and an increased cost.



been 100% effective at repairing these leaks. Duncan Aviation is often an operator's last stop when they have tried other options. Why? Because Duncan Aviation's fuel team will be successful. No aircraft departs with a leak because after repairs, the tank is filled and checked. If leaks are still occurring, the whole process is repeated until all repairs are successful.

Fuel leaks are more than nuisances, they are safety issues. Knowing that the floor of the aircraft cabin is directly above the fuel tank, fuel leaks are definitely not something to be ignored. Duncan Aviation technicians have seen aircraft where fuel was leaking directly into the cabin. Duncan Aviation has

For additional information regarding our fuel team, please contact our airframe sales department at 800.228.4277 and request a fuel tank leak check during your aircraft's next inspection.

Did You Know . . . ?

Mandate Madness Continues

If you still need some modifications to meet the 2005 mandates, our shops in VNY, LAS, SDL, DEN (APA), TEB, LNK and BTL can get you there with our complete roster of 1124, 1124A and 1125 RVSM, TAWS and EGPWS STCs.

Astra/SP/SPX APU Is On Special

We have one APU available for \$390,000 installed. This truly is an exceptional offer because the price of these APU engines has increased dramatically. If you have ever considered investing in an APU, there will never be a better time.

We Are Bleed Switching Experts

Duncan Aviation repairs and overhauls more bleed switching valves than any other service provider in the world. Weekend AOG service is always available.

We Have Avionics Loaners

Duncan Aviation is familiar with all avionics and instrument systems onboard Astra, G100 and Westwind aircraft. Avionics Technical Representative Larry Troyer knows how to keep operators flying with our extensive avionics loaner pool.

Astra ALS Has Changes

Airworthiness Limitation Section of the Astra Maintenance Manual has Revision 3 out and is dated December 30, 2003. Significant changes have been made to some of these inspections and should be reviewed for your applicability. Below are a couple inspections that stand out:

W2 Location e

This wing inspection has changed from a 5000 hour frequency to a 2000 hour frequency. (SPX 4000 hour to 2000 hour). It requires removal of many fuel access panels and some NDT. Gulfstream/IAI is allowing compliance to wait until the next C check.

W14 Location a

This is a new requirement to NDT the wing skin splices, with an initial 5000 hour inspection and a recurring inspection every 2500 hours. (SPX 5000 hours and 2000 hours).

For a detailed review of all changes, please refer to the Highlights Page in the Airworthiness Limitations Section of the Maintenance Manual.


Hawker Tech Reps

Get to Know 'Em

Do you know our two dedicated Hawker technical representatives? Roy Olsen in Battle Creek, Michigan, and Dick Hyde in Lincoln, Nebraska, provide support, answers and troubleshooting advice to our Hawker teams and operators. They also enjoy a close working relationship with Raytheon, which adds to their arsenal of information should the need arise.

What does it take to become a technical representative? Years and years and then a few more years of Hawker experience. Roy Olsen has 30 years of hands-on Hawker experience and Dick Hyde has focused on Hawkers for more than 34 years. Their expertise has proven invaluable to Duncan Aviation and our Hawker customers.

One can imagine that these men have seen just about every scenario a Hawker can create. However, Olsen and Hyde are quick to correct that thought. No one has every answer, but their experience leads them to solutions much more quickly. In fact, Roy and Dick say discovering new challenges and finding solutions to them is one of the greatest rewards of the job!

Many facilities can perform your next Hawker inspection, but none can match our experience. 

Our Hawker Tech Reps, Roy Olsen (above and left) and Dick Hyde (above), each have more than 30 years of hands-on Hawker experience.

HAWKER
experience
by the
numbers

2003

8 Hawker Landing Gear Overhauls	20 Hawker F Inspections
12 Hawker D Inspections	20 Hawker Interior Projects
17 Hawkers Painted	26 Hawker G Inspections
18 Hawker C Inspections	44 Hawker Engine MPis

Mandates and More

Focus on Hawkers

It has been said that one can focus on only one thing. How then can Duncan Aviation be focused in so many areas? Moreover, how can we claim to be experts in each? The answer lies in the arrangement of our workforce and dedication to making every team member an expert in their area. Perhaps nowhere is this better illustrated than with our Hawker teams.

Experience with hundreds of Hawkers has raised our knowledge and efficiency levels to new heights. Our 53 dedicated Hawker technicians are divided into five teams. Every team member was chosen in accordance with our company goal of hiring and retaining the best technicians in the industry. This practice keeps individual projects running smoothly by allowing teams to focus on delivering quality rather than training and orienting new team members.

*I*t is certainly no secret that the new equipment required by the recent mandates has gobbled up most of the Hawker cockpit real estate. And interfacing new equipment with units that are, in some cases, more than 20 years old, is also a challenge. Duncan Aviation's FDS-2000 installation solves both these challenges while building a path to the technology of tomorrow.

The aircraft we have equipped with the Collins FDS-2000 now enjoy state-of-the-art technology that replaces much of the heavy and outdated conventional equipment with lighter weight and dependable LCD technology.

In addition to the FDS-2000 our roster of Hawker STCs includes TCAS, EGPWS, TAWS, FMS upgrades, AHRS and a host of others. If you're ready to breath new life into the aircraft you have come to depend upon, call today for details about our FDS-2000 installation or any of our other avionics modifications.

Landing Gear Requirement Changes

If Raytheon's new 5000 landing / 10 year requirement has made you due for an overhaul, consider Duncan Aviation's Accessory Shop. Put years of Hawker landing gear experience to work for you and enjoy the quick turntime created by our pool of repaired sub-assemblies. Our investment in this program reduces aircraft downtimes by eliminating the time typically required for machining and plating repairs.

DID YOU KNOW?

- Our capabilities also include most Hawker components.
- Duncan Aviation Parts Support Services maintains a large pool of Hawker rotables.
- Duncan Aviation offers the widest range of capabilities in the industry. In fact, we cover every model from the 1A to the 1000.
- We have a Hawker avionics loaner program. Call for details.
- Our new one-piece Hawker upper sidewall makes maintenance a snap. Removing and replacing the panel is a one-person job that takes only a few minutes.

Cheeseburgers, Duncan Aviation and Bill Lear

In today's world of big corporate aviation decisions, business is paramount. This was not always so.

In the early 1960s, Donald Duncan and Bill Lear forged a friendship so strong that it affected the development of the Learjet and resonates today in that product and in business aviation as a whole. In an environment of many noisy aviation maintenance marketing schemes, Duncan Aviation's original commitment to Learjet operators remains as strong as ever.

In 1963, Bill Lear was having trouble getting his Learjet project airborne. Donald Duncan formed a group of six general aviation pioneers who helped get the Learjet going. In exchange, the six received rights of distributorship for the new jets. Later in the '60s, Bill sold his company and the distributorships disappeared; however, at Duncan Aviation, Learjet maintenance grew.

Because of the men they were, Donald and Bill believed in more than business relationships; they believed in each other and in their personal friendship. Bill was a frequent visitor to the Duncan Aviation facility in Lincoln, Nebraska. And whenever he came, there was a "King's" cheeseburger waiting for him; he

loved those juicy burgers and could only get them in Duncan Aviation's home town.

That was the way it was with Donald and Bill, business mixed with personal friendship. That type of thinking hasn't changed much at Duncan Aviation in the last 40 years. Lear operators know that Duncan Aviation is the place for the most knowledgeable, dedicated and reliable Learjet service in the industry. It's a legacy passed down from Donald and Bill's friendship.

Duncan Aviation has performed tens of thousands of Learjet events in the last 40 years. The reason is clear; our passion for Lear's is as strong now as in the days of Donald and Bill.

Oh, and the cheeseburgers are still good too!



Duncan Aviation was one of six original Learjet distributorships and authorized service centers.



Announcing the Duncan Design Collection for the Learjet

We are pleased to introduce the Duncan Design Collection for the Learjet. This collection is comprised of our favorite fabrics, seat and cabinet designs for the entire Learjet cabin, each offering the exceptional quality and emphasis on engineering found in our Silhouette headliner. The Duncan Design Collection employs modern technology to improve efficiencies and inventory processes to deliver Duncan Design style and Duncan Aviation's premium quality at lower costs and with quicker turntimes.



Did You Know . . . ?

Interior Investments Make Sense

More than 15 Learjet operators invested in a Duncan Aviation interior last year. The reason? Impeccable quality and a great service experience, delivered when and as promised. Call today to secure your schedule.

We're Experts in Lear Components

Duncan Aviation is one of the original factory-trained stab actuator repair stations. We repair or overhaul hundreds of

actuators annually (more than one every working day). Our technicians work on most Learjet accessory components.

We Have Learjet Avionics For Loan

Duncan Aviation, Learjet and Duncan Aviation's Avionics Tech Representative Curt Campbell grew up together. From the Learjet 23 on up, Curt and the pros at Duncan Aviation have seen just about everything. In addition, our loaner program keeps operators in the air.

Maintaining Your Tires

The most critical service you can perform to help ensure optimized aircraft tire performance is to maintain proper tire inflation. Unfortunately, this is one of the most neglected functions, and it can result in premature tire wear as well as aircraft tire failures in service.

Effects of Under-Inflation

Too little pressure can be harmful to your tires and dangerous to your aircraft (and those in it). When under stress or when the brakes are applied, under-inflated tires can creep or slip on the wheel. Valve stems can

be damaged or sheared off and the tire, tube, or complete wheel assembly can be damaged or destroyed.

Excessive shoulder wear may also be seen when operating with tire pressure that is too low. For cases of minor under-inflation, there is an increase in wear rate due to greater tread squirm. In a bias tire in particular, the tread is coupled mechanically to the sidewall due to the ply construction. The tread will deflect upward into the tire, resulting in severe lateral scrubbing of the tread each time the tire rolls through its contact patch.

More importantly, under-inflated tires could be damaging the carcass plies due to over-deflection. Aircraft tires are already subject to a high rate of deflection by design rules of the Tire & Rim Association (32% or 35% for aircraft vs. 18% for cars, and 12% for trucks).

For bias ply tires in rotation, the casing plies (insulated by rubber) move against each other. This causes the rubber to undergo shear strain and produce heat. Additional over-deflection will cause more rubber strain and result in a faster rate of heat build-up. This heat will eventually destroy the rubber holding the plies together in a process called reversion, which is the “un-curing” of the rubber (de-vulcanization). When the rubber reverts due to this heat build-up, it loses its elasticity and becomes soft. Eventually, this causes a localized separation. Additional rubbing in this separated area would further degrade the rubber and turn it into a sticky, glue-like substance. When the separation becomes sufficiently hot, there could also be melting of the nylon tire cords in this latter phase of separation. The tire will blow-out when the tire cords and rubber lose sufficient strength and the plies are no longer able to hold back the rising inflation pressure.


In normal operations and when inflated properly, aircraft tires are capable of operating without becoming excessively hot. This may not be true when the tire is under-inflated or over-deflected. Although aircraft tires by design can only roll for a limited distance during each use (since the tire temperature never reaches equilibrium), there is a danger of blow-out

at a significantly shorter distance when under-inflated.

Although under-inflated tires may not blow out immediately, there may be ply separations from over-deflection that can propagate into a failure at a later cycle. Ply separations result from over-deflection and the resulting casing fatigue (the separation of the rubber from the nylon cord).

Aircraft tires that are found to have operated below 90% of operational pressure should be removed from service. Also, the mate on multiple tire bogies should be removed if the tire is found below 80% of operational pressure. (Contact your aircraft tire manufacturer for their specific recommendation regarding removal criteria for under-inflated tires.)

Best Practice

The recommended pressure maintenance schedule can be found in the Care & Service Manuals of the tire manufacturers. As a safe practice, tire pressure should be checked before each flight for infrequently operated aircraft, and every 24 hours for frequently operated aircraft. Check with your aircraft tire manufacturer for their recommended inflation pressure maintenance schedule. This will help ensure trouble-free operations and minimize your operating costs. 

Duncan Aviation thanks Michelin Aircraft Tires for supplying the information within this article.



Tool Calibrations

Duncan Aviation's Calibration Lab has long met the needs of the entire Duncan Aviation enterprise. In 2003, this team calibrated and repaired 5,221 tools for Duncan Aviation alone.

Our capabilities include the following: General Purpose Electronic Test for tools like calibrators, generators, oscilloscopes, multimeters and other electronics; a Microwave and RF Test for signal generators and power meters; Air Data Test for pitot/static equipment; and Dimensional/Physical Tooling like crimpers, torque wrenches, tensiometers and scales. This experience gives us an understanding of your needs. We know the most important factors when choosing a calibration center.

#1 — Turntime

We know time is money. That's why we set up this program. Duncan Aviation's Calibration Lab can calibrate your tools and have them back to you in less than five days.

#2 — Convenience

Duncan Aviation is a one-stop shop and our convenience doesn't stop at your wing tip. Send your tools along with your aircraft for a check up. We can handle it all. (The Lab also has a computer-based tracking system which can personally notify you when your tools require calibration.)

#3 — Quality

The Calibrations Lab is continuously enhancing its Quality Assurance Program to meet the latest government and industry standards. Our calibrations are NIST (National Institute of Standards and Technology) traceable.

Contact us for calibration and repair service you can count on. 

The Duncan Aviation calibration team in the Calibration Lab.



Some things need to be experienced to be truly appreciated.

DUNCAN AVIATION
Experience. Unlike any other.

