A publication of Duncan Aviation

Duncan Debrief

Spring 2014

Duncan Aviation's Lincoln, Nebraska, paint team used 517 rolls of tape, 1,000 razor blades, 79 gallons of paint in four shades of gray and spent nearly 2,500 hours ensuring every square inch of this creative and detailed paint scheme was applied perfectly. The result was breathtaking.

View the timelapse!

www.DuncanAviation.aero/videos/custom-paint-job

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Donald Duncan (1922-1981)

Todd Duncan (middle right) with his father Robert (middle left) and twin sons, Harrison (far left) and PK (far right).

Todd Duncan, Chairman

My aviation career spans a quarter century, and during those years, I've seen almost every one of our competitors bought, sold or change their name. Duncan Aviation has remained exempt from this practice by investing in a family owned brand that's stronger than ever.

Our team's collective courage, attitude and vision have allowed us to connect with our customers on a more personal level than much of our competition. I think that level of respect for all individuals is what helps differentiate us from the rest. We're more than a company, we're a family, and we approach every customer with the same level of care.

Courage

We. It's a strong word and one I hear a lot at Duncan Aviation. Everything we do involves one or more teams. There's strength in numbers. Instead of having one decision maker, we entrust our people—all of our team members—to make the right decision each and every day, whether it's right in front of a customer or internally.

Giving our team that kind of responsibility allows them to step up and show courage. Without the courage of those first few Duncan Aviation team members back in 1956 and the more than 2,000 team members we have today, we wouldn't be where we are. Sometimes those decisions are small, other times they're large. But they're all important ones because they affect our overall goals. Every experience allows us to gain a bit more courage, strength and confidence.

Attitude

One of my earlier memories is of a Duncan Aviation company party. It was 1976, the bicentennial year, so we had a big celebration at my parent's house outdoors. A couple hundred employees and their families came, and I remember feeling this sense of family—somehow, I knew we all supported each other.

I saw this as a young person and that experience, that collective attitude, is something we try to replicate every day at Duncan Aviation. There is no excuse for us growing larger and losing that essence. And we make a conscious effort to keep this feeling alive. I know our customers immediately pick up on that attitude and they, too, are considered part of the family. It's an extra value that comes with the Duncan Aviation experience.

Vision

Benjamin Franklin once said, "By failing to prepare, you are preparing to fail." Failure was never even an option for Duncan Aviation. We've had some tough days, weeks and even years, but I'm really excited about the next 10 years for our company, for business aviation, for my career, as well as for our team members' careers.

I think our 10-year plan lays out a road map for us, certainly one that can change and shift when we encounter the unpredictable, but one we are all behind, and one that we will all contribute to.

As our locations continue to grow in size and number, I look forward to expanding into new customer markets and into global markets where we haven't yet reached or where we've just begun to make connections.

As difficult as business aviation is, I've never been more excited about what's to come. Join us for the ride.

View the timelapse!

www.DuncanAviation.aero/videos/custom-paint-job

Paint. Unlike any other.

At least 150 pairs of hands worked on this large long-range business jet during the five weeks it spent at Duncan Aviation's Lincoln, Nebraska, facility while receiving a gorgeous and unique paint design. Those hands spent nearly 2,500 hours ensuring every square inch of this creative and detailed paint scheme was applied perfectly. Those hours are backed by hundreds of years of experience spent crafting a skill that relies heavily on intuition. The result was, in a word, breathtaking.

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"...but then I looked at what he was doing–the detail, the exactness..."

As soon as Duncan Aviation's paint team saw the renderings of the custom scheme they were asked to apply to one of the largest aircraft the facility's paint hangar has ever housed, the hallways bustled with excitement. The original design was commissioned by artist Wilfrid Buch and boasted countless lines swirling around the fuselage to create a psychedelic three-dimensional image. The job required talent, patience and an attention-to-detail that few paint technicians possess. And the project needed more than one paint team—everyone in the department needed to be on board.

In the past, Duncan Aviation's paint shop had delivered everything from digital camouflage to vintage-inspired plaid jets, but never anything this complicated or on this scale. In fact, no one on the team had ever seen anything like it.

"The first thing the sales staff asked us was, 'Can you do this?' " says Master Paint Specialist Stacy Finch, a 15-year Duncan Aviation paint veteran. "Our immediate response was, 'Of course.' We love a good challenge."

The paint scheme didn't lend itself well to a template or lasers, so the team completed the majority of the work by determining spacing based on landmarks along the jet. They eyeballed where they felt the lines should go, starting from the outside and working their way in.

"It's a very intuitive process. We have years of experience working together and when we look at a paint job, we see the same things and think the same way," says Master Paint Specialist Troy Reinke, who has been with Duncan Aviation's paint department for two decades. "Sometimes one person tapes while the other stands back and gives direction. It's really a team effort."

Without a step-by-step guide, a lot of the taping was trial and error. It took nine days to complete taping on one side of the aircraft. Then, to ensure symmetry, the paint layout team lined the aircraft with paper, traced the tape lines and used the paper as a template on the other side.

It took two days to mirror the image on the second side before the paint team could apply the first color. A typical paint schedule allocates one or two days of taping on the entire aircraft, which is proof the detail in this job was astounding.

The original concept was one color, but Duncan Aviation's design center determined there was no way to accomplish the level of depth the customer desired with just one color, so the team opted for four varying shades of gray and had to tape and paint until all four shades were complete.

All of this work, and a schedule that delivered the aircraft as quickly as possible, required the layout team to spend 40 straight days in the paint bay. And the aircraft wasn't the only one at Duncan Aviation. The Lincoln facility's paint shop simultaneously juggled five other aircraft in various stages of exterior paint application.

After completing the masking tape outlines, every team member available took a portion of the aircraft and helped fine-line tape it. The tedious work moved quickly with upwards of a dozen team members on the aircraft at any time.

"It's rare that we have so many paint team members working at the same time," says Paint Manager Doug Bohac. "It has to be something pretty incredible for that many guys to work so closely for so many hours."

This process was completed four times with each of the colors. The paint team clear coated the aircraft and sent it to the detail crew to ensure all the lines were exact, all microscopic bumps were nixed and every inch was buffed to perfection from tip to tail.

"You can imagine what it's like to detail an aircraft of this size with that many lines," said Project Manager Craig Boesch. "I would walk by the paint bay and return eight hours later and see the same guy in approximately the same spot, but then I looked at what he was doing—the detail, the exactness—and I realized he was moving fast."

Because the team was uncertain how long the process would take, the paint department gave the customer a rough estimate of five weeks, and the aircraft was delivered within a few days of the projected out-date.

"When taking on a project like this, even with all the hours put in and sacrifices made, the paint team is motivated and inspired by the result each time," says Doug. "It's such a transformation, and that's what keeps us coming back, day in and day out."

OWNER/PILOTS
Love Design of New Aircraft

Ernst and Nataly Langner

Most business and private jets are white with a stripe or two to complement the interior and are a nod to the owner's preferences or the company's branded colors. A white base is a practical option because it keeps the jet cooler when sitting on the runway, consequently reducing fuel evaporation. It's also easier to maintain. But in a world where customers can view exact renderings of what their paint scheme will look like and a paint team that'll take on almost any challenge, deliveries from Duncan Aviation's paint bays are getting creative.

Of course, it takes creative owners to dream up something as alluring as the head-turning paint illusion Duncan Aviation applied recently to a large, long-range business jet. Ernst and Nataly Langner, owners and the pilots themselves, fit the bill.

> When we first started looking for a company to paint our Global 5000, we immediately thought of Duncan Aviation.

They approached Duncan Aviation in 2012 about the paint scheme. Their aircraft would arrive at Duncan Aviation's Lincoln, Nebraska, facility green, straight from the factory. They commissioned Artist Wilfrid Buch to design the paint and handed it off to Duncan Aviation's design team to apply the artwork to a nearly 100-foot-long aircraft.

"We had nearly a year to plan the process for this paint scheme, and we used up much of that to ensure we had exactly what we needed before arrival," explained Designer Rachael Weverka. "We had to reverse-engineer the artwork, so we were thankful we had that additional time."

Rachael says interpreting the 2D paint scheme caused the design studio and the paint team to think a bit outside the box. The team decided they needed to change the initial art a bit. One color wouldn't give it the three-dimensional appearance the owners were looking for, so they opted for four very similar grays.

Ernst and Nataly Langner with their son Alexander on delivery day.

Rachael said the Langners were on board with the design team from the very start and had full confidence in Duncan Aviation's changes, knowing it would lead to a better product.

"When we first started looking for a company to paint our Global 5000, we immediately thought of Duncan Aviation," says Nataly. "The designers were very creative in determining out how to accomplish this very intricate pattern, and once we saw what they could do, we knew we had made the right choice."

As soon as the aircraft arrived, the paint team hit the ground running. They weren't certain exactly how long the process would take, as the aircraft needed yards and yards of tape applied, four colors added and days of detail work to ensure a perfect result.

"Duncan Aviation went out of the way to deliver the aircraft on time and with top-quality work," says Nataly.

The Langners say they are pleased with Duncan Aviation's exceptional customer service, which extended beyond the initial delivery date.

"Because our complicated design required some extra work and some follow-up touch-ups, we don't think we could have found a better company to work with," says Nataly.

The Langners were familiar with Duncan Aviation's paint process from past projects. Yet they were still impressed with the results.

"The design team understood from the first moment how the end product should look," says Nataly, "And after several modifications, they were able to deliver the most spectacular aircraft we have ever had."

And spectacular was the goal.

"It certainly turns heads in any airport where we land," she says.

DOUBLE TAKE DESIGN

Chairman Emeritus Robert Duncan and his wife, Karen, surround themselves with the things they're passionate about: aviation and art. So, when Duncan Aviation acquired a new Citation M2, they wanted the jet's paint scheme to reflect the brush strokes of an artist, an abstract artist. They also simultaneously took the term "green plane" to another level with this lime green wonder.

"This is a flying billboard for Duncan Aviation's paint department," says Robert at the jet's unveiling.

Robert requested a "fifth window" be added, displaying a decal painting of his favorite artwork featuring Karen.

The paint scheme designer, Teri Nekuda, has 24 years of experience combining colors and materials to match a variety of customers' needs and desires, and she used the same approach she does with all of her customers when Robert and Karen asked to explore paint schemes at Duncan Aviation's Lincoln, Nebraska, facility's design center.

"It's enjoyable to create a paint scheme that people don't readily expect to see on a plane. The wow factor gets people to react, contemplate and dream of what possibilities lay on the horizon," says Teri.

After more than 50 renderings, Teri and the Duncans had the paint scheme narrowed down to two options: a lime green or bright blue base with paint splatters dotting the fuselage. When asked to describe the final product in one word, Teri responds with "fun."

"It's fun on so many levels. I look at it, and I start to recognize shapes and images. There's a pair of Mickey Mouse ears over here and Woodstock there. It spurs this childlike sense of excitement and creativity that's a cool feeling to have at any age," says Teri.

Of course, there were several other ideas on the table before the final was approved. Robert initially wanted to explore the idea of a decal on the plane, allowing it to be easily changed after just a few years.

View the timelapse!

www.DuncanAviation.aero/videos/M2-timelapse

"It's a great idea and I think we'll end up using decals eventually, but this one looked a bit thick after the clear coat was applied. Also, the decal isn't simply printed on a clear background, so any space outside the paint splotches would have to be lime green and match the paint perfectly, or have a black outline. In the end, this was too complicated of a paint scheme to try and implement decals for the first time."

The Duncans also toyed with the idea of having graffiti on the M2, but the design team was concerned that even though the graffiti might be well received and convey a positive message in the United States, not all countries would view the paint design the same way. So when Paint Shop Manager Doug Bohac mentioned he had recently seen a motorcycle covered in paint splotches, the idea stuck.

"Robert makes me explore other ideas I might not normally gravitate toward because he gives me some direction, but not enough that he stifles my creativity with suggestions," says Teri.

Even after all these changes and updates and scrapped ideas, Teri says it's so rewarding to see how excited a customer gets when the project just—clicks.

"That's when I know I've succeeded at something—when they can't wipe that smile off their faces," she says. "That's a good feeling. That makes every minute worth it."

Teri is also responsible for the pale plaid paint scheme applied to Duncan Aviation's Mustang aircraft, which has turned heads at countless airports since its delivery in 2008.

She said the Duncans decided on the plaid plane's color palate prior to involving her in the design, which made the final decision on that aircraft a bit more difficult.

"Typically I work on the designs or patterns before deciding what colors fit best with a new scheme, so this process is very different for me because the Duncans came in with the colors, but no idea what they wanted," she said.

Fortunately, she ran across the pattern by chance. Robert happened to have a pair of plaid shoes nearby when the duo was discussing the Mustang.

"Adding a plaid to those light colors created some dissonance because typically plaid is bold with great contrast," she says. "I think it broke all the rules in some ways with that aircraft, but it worked, and we got the one-of-a-kind result Robert was looking for."

Teri has also helped determine the paint scheme on several other Duncan Aviation aircraft.

"Robert and Karen want something unique. A lot of people like a simple aircraft, but I don't see Robert as ever having a white airplane. We do things a little differently here," says Teri.

Though the paint shop sees a lot of white jets, they didn't bat an eye when they first received renderings of this complicated scheme. They treated the project just like it was any other customer, providing Duncan Aviation-level quality, delivering the aircraft on time (or early) and then celebrating another job well done.

AOG?
DUNCAN AVIATION RESPONDS RAPIDLY

There are few things worse for an aircraft operator or owner than the news of an Aircraft On Ground (AOG). The phrase indicates that a problem is serious enough to prevent an aircraft from flying, and it doesn't matter if it's at its home hangar or on a landing strip in Timbuktu. The aircraft is grounded. Period.

That's what makes AOGs so costly and inconvenient. The crew and any passengers will typically have to find accommodations, alternate travel arrangements will usually need to be made for the passengers and a trusted technician will have to travel to the aircraft. The technician will then have to determine what's wrong, obtain any necessary tools and parts and secure the necessary paperwork to return the aircraft to service.

Regardless of where an aircraft is stranded or what the AOG problem is, Duncan Aviation takes care to ensure AOG situations are handled as quickly and painlessly as possible.

"Everyone here realizes how difficult AOGs are, and we will work around the clock to do what we can to get an aircraft back in the air," says Andrew Theis, team leader for Duncan Aviation's avionics and instruments customer account reps. He and his team field calls from customers who need repairs or inspections on avionics equipment; many of them from customers who are AOG.

Theis says, "We never turn away a customer, and we do our best to accommodate quick turntimes."

When a customer calls with an AOG, the customer account rep opens a work order and flags it as AOG. Team members give the customers the work order number and suggest that they use a Sharpie permanent marker to write both the work order number and AOG in bold letters on the outside of the box. When the part arrives, Ryan Young, the team leader in Duncan Aviation's shipping and receiving area, immediately recognizes the AOG package and delivers it to the appropriate bench as soon as possible.

"Because we have so many years of experience among us, we know when we hear a particular squawk roughly how long it'll take to duplicate the problem and fix it and approximately how much it's going to cost," says Theis. "We're able to give the customer the usual cost and turntime, and we typically get the OK to go ahead with the work based on that estimate. If we find out it's going to go above the normal scope, we'll call the customer."

When technicians finish with a unit, the customer account reps update the status and electronically send the paperwork to an account rep, who then arranges to ship the unit back. "If the unit is from an AOG, we may arrange for evening or weekend shipping," says Theis.

One time, we had a customer from Dubai, United Arab Emirates (UAE) who brought a defective part with him on a visit to our facilities in Lincoln, Nebraska. A customer account rep was able to get the part to the bench, where the technician performed a same-day turn on it. The necessary paperwork was secured and the part was given back to our customer so he could take it with him when he left.

"It wasn't a high-dollar repair, but we didn't treat him any differently than any other customer," says Theis. "Throughout Duncan Aviation, whether it's on our avionics bench or in one of our shops, our goal is to have happy customers who trust us and know that we're here for them."

AOG in the USA

Scott Griess, team leader for the DME transponder bench, received a call one morning that a fleet of six Cessna aircraft had navigational units that were approaching the deadline on an airworthiness directive. The Original Equipment Manufacturer (OEM) for the units couldn't handle the additional work, so our customer called and explained that if we couldn't perform the inspections, the entire fleet would be AOG.

Duncan Aviation Parts Loaners
www.DuncanAviation.aero/parts/loaners.php

Avionics / Instruments Customer Service

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Andrew Theis
Customer Account Rep

Don Heinlein
Team Leader
International Parts
Sales Rep

Carol Hunt
International Parts
Sales Rep

"Initially, the units presented quite a challenge, and we were concerned we couldn't accommodate the short turntime," says Griess. "My philosophy is to try it, though. No, we're not sure, but we have to give it a try. Our customer called us because he believes in us; he thinks we can do it. We have to maintain our reputation and, more importantly, we cannot let our customers down."

In this instance, the customer pulled the units from five aircraft and flew them to Lincoln on the sixth aircraft. He and the units arrived in early afternoon, and the DME team went to work. One tech stayed late and continued working. The next afternoon, all of the units had been inspected and returned to our customer, and he flew them back home. From start to finish, in 36 hours, all of the aircraft in the fleet were ready to fly again.

Often, calls about AOGs are so common, they become the norm. Autopilot I Team Leader Steve Krings says, "Most of our calls are from customers with AOGs. And we're never sure how many units we'll have in a day, either. Today, we knew before coming in that we had six units scheduled for quick turns—they all need to be repaired, inspected, recertified and shipped out by 6 p.m. tomorrow."

In the past, the autopilot I team members worked solo on the units as they arrived, with one person responsible for a unit from start to finish. Now they operate on more of a cooperative assembly line: One tech does the initial inspection and tries to duplicate the squawk. The next changes the parts, performs any necessary fixes and cleans the unit. After sealing the boards, the unit is handed off for the final inspection.

On any given day, the workload for the bench looks like this: There are four or five scheduled autopilot units, an unscheduled unit drops in and a customer requests a quick-turn repair for a unit from an AOG.

"That's a typical day, and in order to accommodate the workload and quick turntimes, a couple of us will work late, we'll have one tech working overnight and a couple of techs will come in early the following morning," says Steve. "Our mindset is that we're going to come to work today, and we don't know what we're going to face. But it's not a big deal; we may have one unit or seven. Whatever shows up, we're going to deal with it, and we'll do everything to take care of the hot units [from AOGs] when they show up."

Every bench in the avionics department has a similar story. The aircraft that Eric Olson, team leader for autopilot II, work on are often involved in medical flights. They're often older aircraft, and we don't always have a lot of spares for those legacy parts.

Eric says, "One OEM requires a five-day lead time for parts, and med flights with AOG issues don't have that kind of time. As a result of our customers' needs, we've increased our inventory for commonly needed parts."

There are some parts for which a quick turntime is not possible. A complete overhaul for a gyro usually requires two to three days. Jerry Bremer, team leader for gyro I, says, "We regularly have AOG units that require a quick turn, but if the repair is going to take a couple of days, we let our customers know we have loaners and rentals available."

Joe Moritz, team leader for pitot static, also lets customers know about the spares and loaners. "The nature of the problems on the units we repair rarely require more than a day, so we can almost always accommodate same-day turns. When we cannot, we suggest spares or loaners for our customers, so they don't have to wait."

AOG Overseas

Don Heinlein, team leader for international parts sales, remembers when a company in Denmark had an AOG that was scheduled for a flight the following week. We had the part in stock here at Duncan Aviation, but the courier was unable to meet the required time frame.

After mulling over the situation, one of Don's team members, Carol Hunt, got a ticket on a commercial flight to Denmark and hand-delivered the part to the company.

Carol's passport was current, and all of the paperwork had been completed to clear the part for shipping. Even better from the customer's perspective was that the round-trip ticket cost less than waiting on the courier service.

"Shipping parts outside of the United States is distinctly different from shipping them inside," says Heinlein, "because of the amount of documentation required."

Although Duncan Aviation will ship parts that we have in stock and locate parts that we don't, we are required to produce a great deal of paperwork before shipping a part out of the United States.

Some countries, such as Poland and South Africa, require companies to request permission to transfer money from their country to another. Poland, for instance, wants to prevent the exodus of currency from its own economy, so companies are required to show that the product or part is not available in Poland before seeking it elsewhere. Because of requirements like this, Duncan Aviation requires a Pro Forma from a bank to ensure that the funds will be released to cover the costs of the part and shipping.

Any part that is shipped also has to have a Certificate of Conformance (CFC), and most now require an 8130-3. The 8130-3 identifies the part and states what it is for, verifies that it has been inspected and shows the maintenance release tag. Nearly every country requires an 8130-3 now. Germany requires the form on imports for tax rate purposes. Aircraft parts are taxed at a different rate than auto parts, so the 8130-3 identifies the part as an aircraft part.

The United States government also requires an Export Compliance form that verifies the part we're shipping cannot be used to make bombs, drones and the like. Duncan Aviation also has to sign an End User Statement, verifying that we know who the end user is, and that the part is not going to an embargoed country—one that companies in the United States are prohibited from doing business with, such as North Korea, Cuba, Somalia and Sudan.

Once the paperwork is in order, the part is ready to ship. Different countries prefer different carriers, and our customers usually specify who we should contact.

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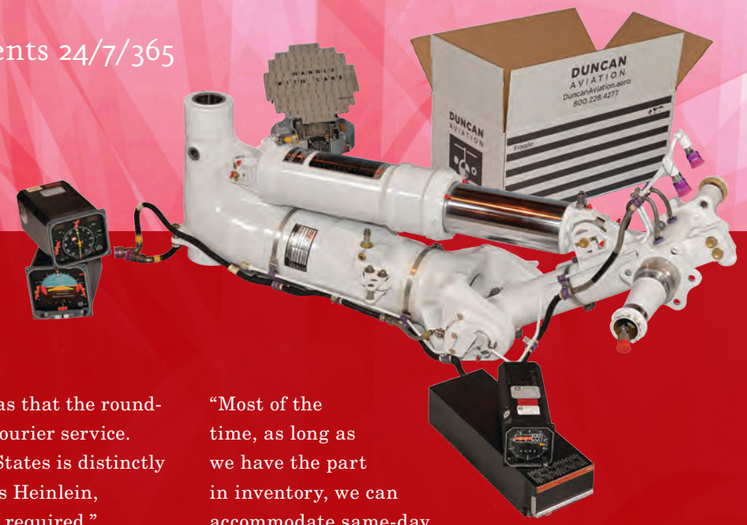


"Most of the time, as long as we have the part in inventory, we can accommodate same-day turnarounds, which is especially important for an AOG," says Heinlein.

Duncan Aviation takes advantage of any means necessary to get a part to a customer, regardless of whether that aircraft is AOG. However, when we know time is critical, we have many options available for getting the part into the customer's hands. We use delivery services such as FedEx or UPS, a courier service such as Sterling, a freight forwarder such as Yusen Logistics and counter-to-counter shipping, which is an option on many domestic airlines.

And, when all else fails, our dedicated parts people have been known to hand-deliver a part!

Shorter Ship Times & Distances

Many of the venders with whom Duncan Aviation has long-established relationships maintain parts' depots in other countries. These inventories can cut shipping times in half. A part shipped from JFK International Airport to Cairo, Egypt, for instance, has to travel roughly 6,000 miles and takes 12 nonstop hours; whereas, if that same part were shipped from a depot in Dubai, United Arab Emirates, it travels 1,460 miles and takes just over four hours, roughly the time and distance from Lincoln, Nebraska, to Los Angeles, California.

AOG? It Will Be A-OK.

There isn't a person at Duncan Aviation who doesn't understand how serious an AOG is. As a company, Duncan Aviation is committed to giving customers exceptional service, and we will do what we can to resolve the issue quickly in order to mitigate the frustration of this potentially costly situation.

Duncan Aviation

Gets AOG Customer BACK IN THE AIR

JAD Donaldson, chief pilot for Avfuel Corporation, along with Co-Captain Chris Kosin, flew the company's Citation XLS+ from Ann Arbor, Michigan, to Harbor Springs last July to pick up eight passengers and return them to Ann Arbor. The clear, sunny day posed no weather problems for the aircraft or crew, and after arriving around 4 p.m. for the 7 p.m. return flight, they noted that all systems were operating normally and shut down the aircraft.

The passengers were among 25 Avfuel executives who had been at a week-long sales meeting in the resort community on the shores of Lake Michigan, and they were looking forward to getting home.

After a quick dinner, Jad and Chris began preparing the Citation for the flight back to Ann Arbor.

"I turned on the aircraft battery switch and began the process of starting up the Auxiliary Power Unit (APU). Approximately 45 seconds after engaging the battery switch, a yellow Crew Alerting System (CAS) message appeared, stating LH ENGINE CONTROL FAULT (ECF).

The APU was in its start sequence, which it completed and ran normally. The APU generator was brought online and avionics were brought up," says Jad.

Jad and Chris discussed the CAS message and decided to shut down the entire aircraft, including powering off and pulling the battery. They then restarted the battery switch with the same results: 45 seconds in, the ECF message appeared again.

Unwelcome News

Reviewing the Aircraft Checklist delivered some unwelcome news: The message required correction before flight. Jad also retrieved maintenance pages, reviewed the fault codes and analyzed the TLA maintenance screen.

"We were AOG," says Jad, "so I immediately called Jayme Park at Duncan Aviation."

Jayme, the Airframe Alternate-Shift Supervisor in Battle Creek, has spent the last 17 years helping Duncan Aviation customers resolve their maintenance issues.

Jad explained the CAS issues to Jayme. "I thought, oh, no! They're stuck," says Jayme. "And then I immediately shifted gears and started thinking about how we can make this work. Jad and I put on our thinking caps and just went for it."

Around 7 p.m., she alerted Bill Walker, engine tech rep in Battle Creek, and began looking for available parts. Jayme also arranged for Aaron LaClair, an engine technician in Battle Creek, to travel to Harbor Springs with the necessary tools and computer equipment so he could download the Data Collection Unit (DCU) information and replace the Electronic Engine Control (EEC) in the malfunctioning engine.

Jayme says, "When we hear that a customer is AOG, at Duncan Aviation that means 'We will make this work.' "

Bill and the engine team were confident that the codes indicated a multiple-level power supply failure on the motherboard in the engine computer, but they remained at the Battle Creek hangar until Aaron could arrive at Harbor Springs and transmit the DCU data back to them for review.

Park Located Parts

Within 15 minutes of Jad's first phone call, Jayme had located the necessary EEC at the Pratt & Whitney facility in Muskegon and set about gathering and processing the necessary paperwork to prepare the aircraft for eventual signoff and return to service.

In the meantime, Jad and Chris had canceled the flight to Ann Arbor, found hotel rooms for the passengers, and called Co-Captain Jeff Squires to prep Avfuel's second aircraft for an eventual parts flight. Jeff flew from Ann Arbor to Duncan Aviation in Battle Creek to pick up Aaron, on to Muskegon to get the new EEC and then to Harbor Springs.

The airport operations manager at Harbor Springs set up power cables, lights and ladders on the ramp so the engine tech could start on the diagnostics immediately upon his arrival. At 11:45 p.m., five and a half hours after Jad received the error code,

JAYME PARK
Airframe Alternate-Shift Supervisor

Aaron was on the ramp, downloading the data from the Citation's left-hand engine's DCU.

Jad has a saying: Usually when people make something look easy, it's not because it is easy but because they work so hard and have the necessary knowledge and experience to do the work right. He says, "Everyone I've worked with at Duncan Aviation has exhibited this principle. They work hard, and they have the knowledge and experience to stick with a problem and resolve it."

That perseverance paid off over the next four hours. At 12:30 a.m., Aaron emailed the data to the engine team that was standing by at Battle Creek. A careful analysis showed that the codes didn't point to a specific issue. Jad and Aaron on the ramp at Harbor Springs and Jayme and the team in Battle Creek spent about an hour discussing the various options.

Around 2 a.m., Aaron and Jad pulled the functioning right-hand EEC, swapped it into the left-hand engine, and put the new part in the right-hand engine. By 3:45 a.m., when Jad brought the Citation back online, the onboard maintenance diagnostics returned no error codes, the TLD screen showed an N for both engines, and the channel assignments were normal.

The aircraft was no longer AOG, and there was still a little time to get back to the hotel and get some sleep before the day of shuttling passengers began.

A Valuable Relationship

Jad says, "We at Avfuel are fortunate to have access to technicians like Jayme Park. Jayme jumped in and used her leverage, intelligence and experience to get this issue resolved. I'm also fortunate to have the relationship I do with Duncan Aviation–it's like having my very own maintenance team. It doesn't matter when I call, either; whether it's late at night or over the weekend, Duncan Aviation has a bunch of people who really care... people like Jayme who are passionate about what they do and do everything they have to do to take care of their customers."

Meet Jerri

Experience. Unlike any other.

Duncan Aviation has team members from India to Michigan and our backgrounds are even more diverse. But a common thread that ties us all together is an inherent sense of doing the right thing and a positive attitude that allows us to be a step above the rest.

It's the people within a company who create such a strong brand. Duncan Aviation is an experience, unlike any other. We share stories like this one within the company daily as a reminder to all team members just how much our customers mean to us and what it takes to create that exceptional experience time and time again.

Who do you trust to work with civil aviation authorities worldwide?

When working with civil aviation authorities from across the globe, it's good to have a knowledgeable team on your side. Without proper planning, turntimes can go months past the delivery date, but Duncan Aviation plans ahead and obtains certificates prior to an aircraft's arrival.

Meet Jerri Becker. As the certification coordinator for a Germany-registered Falcon 900, she made sure every requirement was met along the path to European Aviation Safety Agency (EASA) certification and was even able to deliver the aircraft early.

From the moment the customer requested a laundry list of inspections, interior work and avionics upgrades, the race was on to track down the data to obtain design change approvals that complied with EASA standards.

Flammability data, floor plans, the interior maintenance manual, completion specifications and other documents are required to obtain design approvals, but tracking down exactly what is needed for Design Organization Approval (DOA) in a sea of paperwork can be a daunting task.

"After exhausting all resources and relationships to obtain the data, we can re-engineer it in house, but that takes extra time and adds to the overall cost, so we really try to work with the original source," says Jerri. Fortunately, if re-engineering is required, it is done prior to the aircraft's arrival and doesn't affect the overall turntime.

Even with all that planning, something unexpected almost always materializes. Duncan Aviation team members are excellent at rolling with the punches, problem solving and putting in a few extra hours to ensure an on-time delivery.

For more stories visit *www.DuncanAviation.aero/experience.*

Meet Lars

A good design must reflect the personality of the aircraft owner while remaining functional.

Meet Lars. He spent hours diligently working with the difficult-to-wrangle material of hair hide to create a custom piece.

When a Texas rancher brought his Learjet 40* to Duncan Aviation's Lincoln, Nebraska, facility to have the interior updated, the design team got to know him on a personal level before crafting an interior that mirrored his style and met his needs.

Aircraft Completions Designer Rachael Weverka helped the customer escape the ordinary with the distinctive material of hair hide, because—in her words—"what could be more perfect for a rancher?"

By the time the design team was done with the Learjet 40, it had new seats, lower sidewall, carpet, runners and faux finish on the countertops. The most notable of these updates was the hair hide runners. The unique material took a bit of creativity and Upholstery Master Specialist Lars Larsen's years of experience to ensure it lay properly.

"The rustic hair hide and smooth leather complemented each other really well, but it certainly wasn't the simplest material to work with," says Lars. "It took a lot of very careful and painstakingly slow sewing, but the result was pretty incredible. The customer was ecstatic, and that made every hour worth it."

Lars said working with an organic material like this one has unique challenges because each piece is different. He made a pattern and laid it out on the hides to pick the very best pieces that blended together yet juxtaposed enough to create a pattern that both flowed and created interest.

"Some pieces have more movement in the pattern, a few had much darker sections and still others had flaws. We hand-picked the best pieces and created a one-of-a-kind runner," says Lars.

A runner would normally take Lars a total of eight hours, but he spent nearly 40 worthwhile hours working on the custom piece.

Aircraft Parts Shipping 101:

Navigating U.S. Government Import Regulations

In 2013, Duncan Aviation imported 4,131 shipments from 53 different countries. These shipments included everything from new aircraft parts to aircraft components arriving at Duncan Aviation for repair or overhaul services. Whatever the purpose of the import, they all cleared U.S. Customs and Border Protection and a number of other U.S. regulatory agencies before they reached their final destination. This importation process is a complicated web of governmental regulations that, if not navigated carefully, will cause unwanted delays and unexpected fines and fees.

Steve Rothanzl is Duncan Aviation's international compliance officer. He, along with Monica Bohling, international compliance specialist, has a responsibility to minimize the company's exposure to fines by staying in compliance with all United States government policies regulating the import and export of all shipments into and out of the United States, either destined for or leaving Duncan Aviation. They do this by continuously studying the ever-changing and often vague government regulations and educating both Duncan Aviation customers and team members on what is required to avoid delays, fines and duty fees.

The Harmonized Tariff Schedule (HTS) of the World Customs Organization is recognized worldwide by participating government agencies. In the United States, it is the primary resource for determining tariff classifications for imported goods. Every shipment imported is given a numerical classification that is uniformly recognized throughout the world. The six-digit code for aircraft parts is 8803.30. Each country can then apply further classification that gives them additional controls on the duty fees and importation requirements for specific items.

Steve Rothanzl
INTERNATIONAL COMPLIANCE OFFICER

Monica Bohling
INTERNATIONAL COMPLIANCE SPECIALIST

Duty-Free Import

In the aviation industry there are two primary provisions under U.S. law that allow for duty-free import. They are U.S. Goods Returning and the classification of aircraft parts. Steve says this is where knowing the government regulations helps in avoiding delays and fines. "Many times, customers will make the assumption that if the part was removed from their aircraft and sent to Duncan Aviation for repair, they should be able to clear customs with no added fees. On the surface, I agree. But nothing is that simple when it comes to government regulations."

The classification for U.S. Goods Returning allows for duty-free importation. In order to use this classification, the importer of record, Duncan Aviation, must be able to prove the item being imported was in fact manufactured in the U.S. and no alterations were made abroad. However, with the evolution of business aviation, this documentation can be difficult to obtain. There are many aviation OEMs headquartered in the United States that manufacture their products elsewhere. Those products are considered goods from the manufacturing country, not the U.S., and therefore do not qualify for duty-free entry into the United States under the U.S. Goods Returning classification.

With the duty-free aircraft parts classification (8803.30), you could believe that a part removed directly from an aircraft, packed in a box and sent to Duncan Aviation would indeed be classified as an aircraft part and qualify as duty-free. You could argue that. But chances are, according to current U.S. Regulations, you are most likely wrong.

A part is classified by its function at the moment it enters the United States. For instance, a flight data recorder sent to the U.S. as an individual component not attached to a larger avionics system would be classified as a flight data recorder. To put it simply, if an item's function has a category specifically named in the Harmonized Tariff Schedule of the U.S., it must be classified there. Because of the rules in the regulations of classifying goods, very few parts qualify to be classified as an aircraft part (8803.30). Remember those 4,131 parts imported last year? Only 268 met the full requirements to be properly classified as an aircraft part and receive duty-free entry. That is fewer than 7 percent.

Although the rules of classifying shipments as aircraft parts are stringent, there are other avenues to reduce duty fees. Civil aircraft parts that do not meet the requirements to be classified as aircraft parts may qualify for a U.S. Government special tariff treatment program. The Articles Eligible for Duty-Free Treatment Pursuant to the Agreement on Trade in Civil Aircraft allows for many items that are not classified under the aircraft part classification (8803.30) to enter the country duty-free if it can be proven that the part is used on a civil aircraft and is not used by the Department of Defense or U.S. Coast Guard. For example, the flight data recorder mentioned before would normally have a 2.6 percent duty fee. However, it can now receive duty-free entry if this criterion is met. Both Steve and Monica use this special tariff treatment program to the benefit of Duncan Aviation customers when applicable.

Completing Paperwork

Most penalties and delays occur because commercial invoices are inaccurate or incomplete. Monica's recommendation when preparing a shipment destined for Duncan Aviation is to include as much specific information about the part being shipped as possible. "A commercial invoice should include an accurate part number, quantity, description, value and country of origin, as well as the intended purpose for importing the item into the U.S.," says Monica.

Duncan Aviation is ultimately responsible for the accuracy and completeness of the commercial invoice provided to U.S. Customs. To minimize penalties and delays, they maintain an ever-growing database of properly classified aircraft parts. This information is used by Duncan Aviation and its import brokers to make the process of clearing shipments through U.S. Customs more efficient.

Monica says managing imports through U.S. Customs is only one part of the function of the international compliance department at Duncan Aviation. "We study the regulations of 14 U.S. Federal agencies that monitor the import and export of goods into the country. As new regulations arise, we educate our teams and improve our processes to provide a seamless international shipment experience for our customers," says Monica. "Our ultimate goal is to keep international shipments moving while reducing costs and delays."

AVIONICS & INSTRUMENTS

BY THE NUMBERS

1985 Year Duncan Aviation Avionics Satellite Network Was Established

Different Customers **8,600**

3,600 Average Monthly Customer Service Calls

Average Monthly Tech Support Calls **950**

Tech Support Hours **24/7**

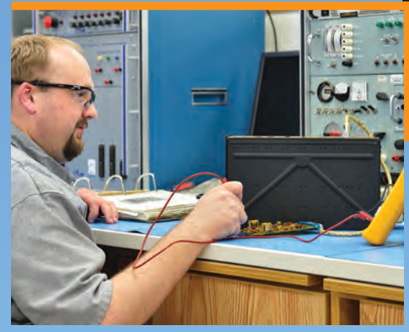
94 Team Members
- 85 Techs
- 5 Customer Account Reps
- 4 Tech Reps

1,179 Years of Aviation Experience

26 Silver Wings Members

Duncan Aviation team members employed at least 25 years are inducted into the Silver Wings Club. In 2014, Duncan Aviation Avionics & Instruments will induct five new members, bringing the total membership to 31.

135 Years of Military Experience



Eric Olson works on the oldest known repaired avionics unit, a Bendix M4C autopilot.

15 Number of Different Product Lines Serviced

8 Areas of Expertise
- ADF / DME
- NAV / COM
- Gyro I and II
- Radar
- PST
- Calibration
- Autopilot
- Indicators

2,450 Number of Available Loaner Units

50,503 Unique Part Number Overhaul/Repair Capabilities

$7,000,000 Value of the Loaner Pool

150 Average AOGs Worked Each Month

231 Test Sets

2,914 Sq Feet of Test Bench

Average Number of Units Overhauled/Repaired Each Month **1,571**

5 days Average Turn Time

2013

A Year of Expansion

The in-house hydraulic Skydrol test bench provides additional capacity and capabilities for large-body aircraft.

For Duncan Aviation's Accessories area, 2013 was a year of growth. The service shop doubled in size and cutting edge technology bolstered available in-house capabilities. This growth and accompanying shop enhancements were all completed with the customer in mind. Marty Lincoln, manager of Duncan Aviation's accessories area, is serious about doing all he can to support every accessories customer. "By investing today, we are prepared tomorrow to meet all of their needs in our house," he says.

Here's a brief glimpse into the expansion of Duncan Aviation's Accessories Services in 2013.

You've heard us talk about it enough, now it's time to see it for yourself.

The expanded accessory shop service area added approximately 6,300 square feet, doubled bench space and added new tooling and expanded in-house capabilities, including an overhead crane (1) and a new paint booth (2) with curing room.

A new 300 square foot paint booth and a 400 square foot curing room increase work capacity and improve efficiency.

The new Fryer Machine Systems CNC mill has a near 3,000 pound load capacity, a table size of 17x63 inches and position accuracy of +/-0.0002 of an inch.

Duncan Aviation's Non-Destructive Testing team added weekend shift coverage to help meet shorter turntime demands while enhancing the customer service experience.

Lincoln's New Hangar G, for Green.

This summer, Duncan Aviation will complete the largest expansion project its Lincoln, Nebraska, campus has ever seen. The 175,000-square-foot facility will have two 40,000-square-foot maintenance hangars and a 95,000-square-foot office and shop space.

The expansion comes in response to customer requests and changing customer needs. As the industry continues to shift toward larger business aircraft, a trend fueled by technological advances and increased globalization, Duncan Aviation's current hangars are unable to accommodate the volume of maintenance, modifications and completions work our customers require.

"We decided to build now because the size of aircraft we're working on and will continue to work on simply doesn't fit well in our current facilities," says Chief Operating Officer Jeff Lake. "We anticipated this trend, which is why we invested in the new paint facility two years ago. Now it is time to support the maintenance side."

Sensors automatically dim hangar LED lights depending on daylight.

Going Green

When customer demand convinced Duncan Aviation's senior team that it was time to invest in a new, larger hangar facility, the team wanted to ensure it was cutting edge, just like the aircraft services provided inside its walls. That priority also aligned well with the company's desire to make "green" decisions whenever possible.

"Things that are good for the environment are good for our employees, and that translates into an excellent experience for customers as well," says COO Jeff Lake.

Kyle Link, Tectonic Management Group, Inc.'s designer/builder senior project manager for the expansion, says Duncan Aviation chose materials and design elements that are a new concept in a hangar environment. From the LED lighting that senses daylight and automatically dims itself to the radiant floor heating, it's state of the art.

"You can't cost effectively dim fluorescent lights, so you'd have to shut off individual bulbs, but with the LED lights, you can gradually dim, saving energy and making it less apparent to team members," says Kyle. "Combine that with the skylights and windows we added, and it's brighter in the hangar with all the lights off than any of the other hangars with every bulb lit."

144 10-foot prismatic skylights and 15-foot double layer sidewall daylight panels in each hangar door allow natural light in the hangar.

The new hangar takes advantage of all possible natural light, starting with 144 10-foot skylight sections. Although the skylights are just two feet wide, because the material is prismatic, by the time that light reaches the bay floor, it covers six or eight feet and distributes the light so team members don't end up working in a hot spot, says Kyle.

Each hangar door also has 15-foot double layer sidewall daylight panels to let in more light without affecting the interior temperature.

Heating and cooling the bays can also be a challenge, especially in extreme weather when the doors open and close on a regular basis, letting new aircraft in and delivering completed projects. Therefore, the senior team opted for radiant floor heat with insulation around the perimeter's foundation and advanced insulation strategies in the walls and roof to help keep the heat in on cold Nebraska winter days.

"In a hangar, you're really only interested in the heat in the first eight or 10 feet, so to heat the ground and let it rise instead of heating the air and pushing it down just makes sense," says Kyle. "The bay will also recover a lot faster after opening the hangar door, which is much more comfortable for the team members working on the floor."

Many of the options in the hangar go above and beyond the energy code, a deliberate choice.

"It was really an easy decision to invest a bit more up front and do what's right for our environment, especially if it means we'll save money in the long run," says Jeff. "With as quickly as technology changes, we need to be a bit ahead of the game."

Radiant floor heating and advanced insulation strategies in the walls and roof help keep the heat in on cold Nebraska days.

Filling the Hangar Earlier than Expected

Though the full maintenance facility will be complete this summer, in January, the north hangar bay opened early. The windows had been installed, the floors had been coated and—with a Falcon 7X leading the way—four jets needing service entered the new maintenance bay.

"The hangar opened up a few weeks ahead of schedule," says Airframe Services Manager Chad Doehring. "It needed to be available sooner in order to meet the needs of our customers and their growing aircraft size."

Chad says the structure shop and engine line shop opened at the tail end of January.

"To properly prepare for this opening, we hired and trained all throughout 2013, building up our teams," Chad says. "We've continued to do so throughout 2014."

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Duncan 411

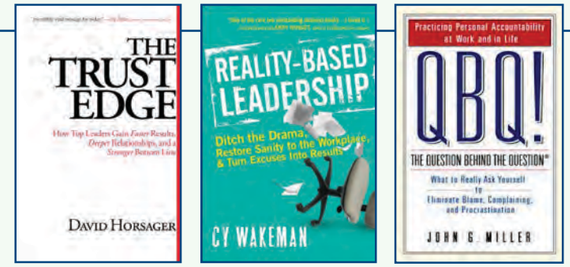
NEWS & TECH UPDATES

n. (duncan aviation): the most comprehensive, family-owned aircraft support organization with a history of trying new ideas and an ability to innovate and transition itself into emerging trends.

The "Duncan 411" addition to the *Duncan Debrief* is meant to keep you up-to-date on the continually changing aviation industry. In it, you will find Duncan Aviation news and technical updates that may affect you or your aircraft.

2014 NBAA LEADERSHIP CONFERENCE: LEADERSHIP: ACCOUNTABILITY IN ACTION

Duncan Aviation Vice President of Business Development Jeannine Falter with ServiceElements President and CEO Bob Hobbi, and renowned speaker Coach Lou Holtz.



Duncan Aviation provided attendees with a three-book speaker bundle as part of a Platinum sponsorship package.

The 2014 NBAA Leadership Conference speaker line-up included: David Horsager, Cy Wakeman, Topher Morrison and John Heffron, John Miller, Robyn Benincasa, Garrison Wynn and Coach Lou Holtz.

"At Duncan Aviation, we strive to give each of our team members the tools to be the best leader possible within their own teams and company wide. We challenge them to continually improve and learn new skills, and to motivate one another and act with integrity. Duncan Aviation also sponsors NBAA's Leadership Conference to support other aviation professionals attain their personal leadership goals. It was an honor and privilege to serve as co-chair of the 2014 NBAA Leadership Conference and I look forward to another great conference next year in Tucson." - Jeannine Falter, Duncan Aviation Vice President of Business Development

The theme was Leadership: Accountability in Action. Attendees were encouraged to remember that the responsibility and opportunity to lead at a higher level and make a difference is theirs alone. They needed to be actively involved and invest energy and enthusiasm to gain the results they want.

As part of Duncan Aviation's Platinum sponsorship package, a three-book speaker bundle was provided to every attendee. Duncan Aviation values leadership development and provided attendees with the means to continue their leadership education long after the conference ended.

We hope to see you next year in Tucson, Arizona, February 24-26. Hear great speakers who will help sharpen your leadership skills and network with other industry leaders.

Patrick Klein, avionics tech, is running a TH250 Tac/Com control head through a function test. This unit provides tactical channeling for up to four independent transceiver systems.

DUNCAN AVIATION EXPANDS HELICOPTER AVIONICS CAPABILITIES

Duncan Aviation's avionics and instruments department has expanded its helicopter avionics capabilities by building three new diagnostic test sets in support of products from Northern Airborne Technology LTD (NAT), dba Cobham Avionics.

Dustin Johnson, avionics team leader, has seen a steady growth of helicopter operators call and request avionics services. "Duncan Aviation has been working on NAT avionics units for more than six years. Each year we see more and more helicopter operators turn to us for service," says Dustin. "We want to be prepared to meet their needs and will continue to invest in this technology."

Dustin says that in the event his team does not have a current test set capable of repairing an operator's unit, in most cases they are able to build one. "It doesn't take as long as you might think. We order the manual, build and test the test set, perform the repair or overhaul services and return the unit to the customer often quicker than they could get the work performed elsewhere."

Now with 15 test sets specifically built to troubleshoot and test hundreds of different NAT models and part numbers, Duncan Aviation has full overhaul and repair capabilities on many NAT units.

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Tech Report

SECOND FALCON 900B WITH EFI-890R RETROFIT UPGRADE COMPLETED

Duncan Aviation is pleased to announce the completion of its second Falcon 900B project with Universal Avionics' EFI-890R cockpit retrofit upgrade installed. The second aircraft also showcases a newly designed interior, paint and fully digital HD cabin/management/entertainment system.

The EFI-890R cockpit upgrade replaces 25 older instruments and significantly improves reliability and situational awareness. The cockpit upgrade presents a simple concept: Replace only the most critical components to maximize upgrade efficiency. This straightforward solution provides significant weight and power savings, increases reliability and reduces maintenance costs. The operator will realize less downtime and experience maintenance cost savings while receiving the benefits of the latest advancements in avionics technology comparable to current production OEM aircraft.

The avionics suite includes five high-resolution Universal EFI-890R 8.9" Advanced Flight Displays, with Engine Interface Units (EIU) that replace the analog gauges. Dual Universal UNS-1Fw Flight Management Systems (FMS) provide Wide Area Augmentation System/Localizer Performance with Vertical Guidance (WAAS/LPV) capability. Dual Vision-1® computers provide Synthetic Vision and dual Application Server Units (ASUs) support procedural checklists, electronic documents (Edocs), Present Position (depiction) of aircraft on approach plate overlays and an Enhanced Vision Infrared Camera System (EVS-1500).

"We are thrilled with the momentum we have with two delivered aircraft featuring this exciting upgrade," says Senior Avionics/Installations Sales Representative Steve Elofson. "The upgrade offers state-of-the-art capabilities that operators have been asking for, enhanced safety and reduced operational costs. We are very proud to provide this new and exciting upgrade for the Falcon 900B."

Duncan Aviation's second Universal Avionics' EFI-890 install.

Through its Organization Delegated Authority (ODA), Duncan Aviation has completed these new Supplemental Type Certificates (STC) for the upgrade:

- ST01736WI Universal Avionics EFI-890 Flight Deck Retrofit Falcon 900.
- ST01735WI Universal Avionics UL-801 Datalink System (FANS-1A+ approval pending).

In addition to the cockpit upgrade, Duncan Aviation completed several interior upgrades, including complete soft good refurbishment, new cabinet veneer, Duncan Design Collection PSU overlay panels with EMTEQ LED lighting, radiused drinkrails and pull-out sidewall tables, hi-lo conference table from Enflite, right-hand aft configuration change to add a berthing divan, upper galley modifications, natural stone galley and vanity counters, and hardware plating. Duncan Aviation installed new winglets prior to painting the aircraft. This brings Duncan Aviation's winglet installation total to 58, the most in the industry.

Duncan Aviation also installed Rockwell Collins' Venue™ cabin management system, providing passengers a High-Definition cabin entertainment experience. The Venue CMS system includes the new Skybox™ providing an easy and convenient solution to watch the latest Hollywood movies and TV shows on the new HD cabin monitors or streamed wirelessly to or from their Apple devices.

A nine inch touch screen provides full system control including galley functions, cabin lighting, entertainment, temperature and cabin call.

Passenger control units are installed at every cabin seating position and are layered similar to an iPhone.

Jason Thuman
Install Team Leader

VIDEO WALKS THROUGH FEATURES OF ROCKWELL COLLINS' VENUE CMS

Duncan Aviation recently installed Rockwell Collins' Venue Cabin Management System (CMS) upgrade in two Falcon 900B aircraft and developed a video walk-through that shows those interested in potentially installing the system how it works.

"Our avionics team was impressed with the installation results and continues to see a surge in demand for Venue upgrades. Many existing systems are becoming obsolete as their technology has become dated," says Senior Avionics/Installation Sales Rep Steve Elofson. "Upgrading to a current generation CMS like Venue provides not only the popular features expected today, but the new systems are well-supported and have a positive effect on the value of the aircraft. This video helps customers better visualize how the system would integrate in their aircraft."

> n. (CMS): Duncan Aviation has completed the Rockwell Collin's Venue Cabin Management System upgrade in two Falcon 900B aircraft. Watch our video walk-through.

In the video, Duncan Aviation's Install Team Leader Jason Thuman walks viewers through the entire cabin, highlighting the all-new High Definition (HD) CMS supplying intuitive user interface through touch-screen controls and wireless iPad cabin control.

To view the brief 3:25 minute video, visit *www.DuncanAviation.aero/videos/CMS_review*.

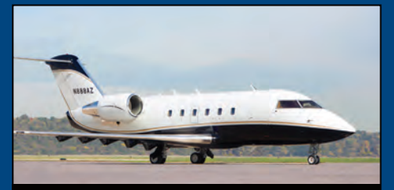
Aircraft Listings

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

2005 Falcon 2000EX-Easy, SN 58

2008 Gulfstream 200, SN 195

1983 Learjet 55, SN 097



1984 Challenger 601-1A, SN 3024

1986 Citation III, SN 650-114

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DUNCAN AVIATION-AZO REMODELED

Duncan Aviation's Kalamazoo, Michigan, location recently received a much-needed facelift.

Started in late summer of 2013, the work included a new, relocated entrance with a circle drive and updated Duncan Aviation signage, new exterior finish, a complete redesign and reconfiguration of the customer lobby area, the demolition of the oldest hangar on the field and the tear-down of a line shack.

The vehicle gate located in the middle of the Duncan Aviation buildings was also enlarged and relocated.

Interior work included a newly designed lobby with a large front desk, a kitchenette and sitting lounge, a separate pilot's lounge with two individual sleep rooms, updated bathrooms and newly remodeled office areas. Most of the work was completed by January 2014 with the exception of the landscaping and ramp work that will be finished this spring.

The line service facility located at the Kalamazoo/Battle Creek International Airport in Kalamazoo has been operated by Duncan Aviation since the company acquired Kal-Aero in 1998. That acquisition included both the full-service Battle Creek, Michigan, location as well as the AZO facility, which was where Kal-Aero started in the 1960s. In 1992, Kal-Aero opened a new facility at the W.K. Kellogg Airport in Battle Creek (BTL) and with the exception of some very small restroom upgrades, the AZO facility wasn't updated in the last 21 years.

n. (AZO facelift): work included a new, relocated entrance with a circle drive and updated Duncan Aviation signage, new exterior finish, a complete redesign of the customer lobby, the demolition of the oldest hangar on the field and the tear-down of a line shack.

"Two years ago, the Kalamazoo airport upgraded with new terminal and tower facilities," says Mack Jones, facilities manager for Duncan Aviation in Kalamazoo and Battle Creek. "The AZO airport's new facilities really made our section of the airport look tired. Since we serve a lot of transient fuel customers from this facility, it was obvious we needed to upgrade to make their experience more enjoyable."

JOHN SLIETER NAMED CHAIRMAN OF HONEYWELL ADVISORY BOARD

John Slieter, Duncan Aviation's vice president of sales, was recently named the chairman of Honeywell's Channel Partner Advisory Board (CPAB).

In this role, John will work with Honeywell leaders to improve internal communication and external promotion to channel partners and mutual customers. During his tenure as Chairman of CPAB, John's goal is to help evolve CPAB into a global advisory board, moving to a strategic advisory role.

"I am honored to serve on this advisory board," John says. "Honeywell remains a leader in the aerospace industry and these channel partners represent all of the most successful service providers in business aviation. I look forward to working with Honeywell and the other members of the board."

TIM LOCKERBY NAMED REGIONAL MANAGER OF GREAT LAKES AREA

Tim Lockerby joined Duncan Aviation in February 2014 and is the new Regional Manager for the Great Lakes region of the United States.

"I'm a strong believer that customer relationships are built face-to-face over time, and that nothing replaces sitting down with a customer and listening. I love to travel and look forward to seeing every single customer in my region and learning as much as I can about them," Tim says.

He has been flying "anything with wings" since he completed his private pilot training at Clow Airport in Naperville, Illinois, when he was 16 years old. Tim bought a Cessna Cardinal in 1997 and replaced that with a Cessna 172 in 2002. He and his wife, Lisa, have three children who'll be heading off to college in the not-too-distant future, so Tim says he's mostly flying remote-controlled airplanes for the time being.

After graduating from the University of Illinois with a degree in marketing, Tim worked at Priester Aviation at Palwaukee Airport (now Chicago Executive). He sold avionics upgrades and maintenance.

Prior to coming to Duncan Aviation, Tim was the National Sales Manager for Aftermarket at Rosen Aviation for ten years, and during that time, Duncan Aviation was one of his customers. "I was always impressed by how Duncan Aviation treated our shared customers, me as a salesperson and Rosen as a vendor. My decision to join the Duncan Aviation team was a pretty easy one," Tim says, "as I already know the culture and how Duncan Aviation treats its people."

"We're happy to welcome a familiar face to the Duncan Aviation team," says Doug Alleman, manager of airframe services and regional sales. "Tim is absolutely passionate about flying and has nearly two decades of experience in the aviation field. He has the added advantage of having well-established relationships with a number of our customers in the Great Lakes region."

Call or send a text to Tim Lockerby at 630.207.7460 or email him at Tim.Lockerby@DuncanAviation.com.

QUICKTURNS ON P&W HSIS NOW OFFERED AT DUNCAN AVIATION

Duncan Aviation recently announced that its Battle Creek, Michigan, facility can now provide operators with a QuickTurn Hot Section Inspection (HSI) program for Pratt & Whitney Canada (P&WC) engines.

"We are excited to be able to offer aggressive turntimes on P&WC hot sections," says Dan Arrick, Duncan Aviation's Pratt & Whitney Engine Service Sales Specialist. "Many operators will want to take advantage of this over a weekend so the maintenance impact to their flying schedule is at a minimum."

In addition to the engine support, Duncan Aviation has airframe service capabilities on the main airframes that fly P&WC engines models, allowing operators to have airframe work performed while their engine maintenance is being completed.

Duncan Aviation has provided overhaul management and Hot Section Inspection services for P&WC engines through its relationship with P&WC and a network of authorized service providers for more than 30 years. More than a year ago, though, P&WC opened an HSI back shop located within Duncan Aviation's hangar in Battle Creek. The 3,700-square-feet of work and office space is fully staffed by a team of Pratt & Whitney Canada engine technicians.

"Our customers can really benefit from the shop being located here on-site," Dan says. "Shortening downtime and controlling expenses are on the forefront of every operator's mind. Having a P&WC HSI repair facility located in Battle Creek cuts the time and expense necessary to send out parts for factory inspection. Now all we have to do is walk them down the ramp to the shop. Not only do Duncan Aviation technicians have unprecedented access to OEM technicians and engines are delivered out of maintenance quicker, but parts shipping costs are also nearly non-existent."

> n. (QuickTurn Hot Section Inspection): take advantage of a QuickTurn HSI over a weekend and keep the maintenance impact to your flight schedule at a minimum.

Duncan Aviation has performed HSI services on-wing for PT6, JT15D and PW500 series engines for years. Customers can also receive line maintenance for PT6, JT15D, PW300, PW500 and PW600 series engines at the full-service aircraft maintenance facilities in Battle Creek, and Lincoln, Nebraska, and Duncan Aviation has eight strategically based U.S. Engine Rapid Response teams on-call and equipped to travel to a customer's location to perform engine R&Rs and HSIs and technical support at a moment's notice. Duncan Aviation also provides overhaul management services for PT6, JT15D, PW300 and PW500 engines and works with ESP, JSSI and Power Advantage maintenance plans.

CJ2+ UPGRADE PROGRAM ANNOUNCED

Duncan Aviation is pleased to announce a collaboration with Cessna Aircraft Company, a Textron Inc. (NYSE: TXT) company, on an upgrade program for the Cessna Citation CJ2+ aircraft.

Cessna designed and installed the state-of-the-art Garmin G3000 avionics suite in a CJ2+ aircraft owned by Cessna. Duncan Aviation is performing behind-the-scenes work of obtaining FAA Supplemental Type Certification (STC) for the upgrades. In addition to the avionics upgrade, the workscope also includes a redesigned cockpit that shaves inches off the cockpit floor pedestal and improves design aesthetics in the cockpit, new pressurization and environmental systems, LED exterior lighting and additional upgrade options.

The Garmin G3000 avionics package represents a quantum leap in terms of situational awareness, intuitive ease-of-use and visual appeal. The suite includes three 14-inch high-resolution displays with split-screen capability and touch-screen control panels.

"When we started exploring this upgrade, we knew we would have a trusted partner in Duncan Aviation. They have demonstrated the capability of developing upgrade programs that bring operators of aging aircraft the features they want while keeping them in their current aircraft. Our two organizations' strengths complemented each other on this project and we are proud to bring this collaborative effort to the marketplace," says Matt Wild, program manager, Cessna Customer Service.

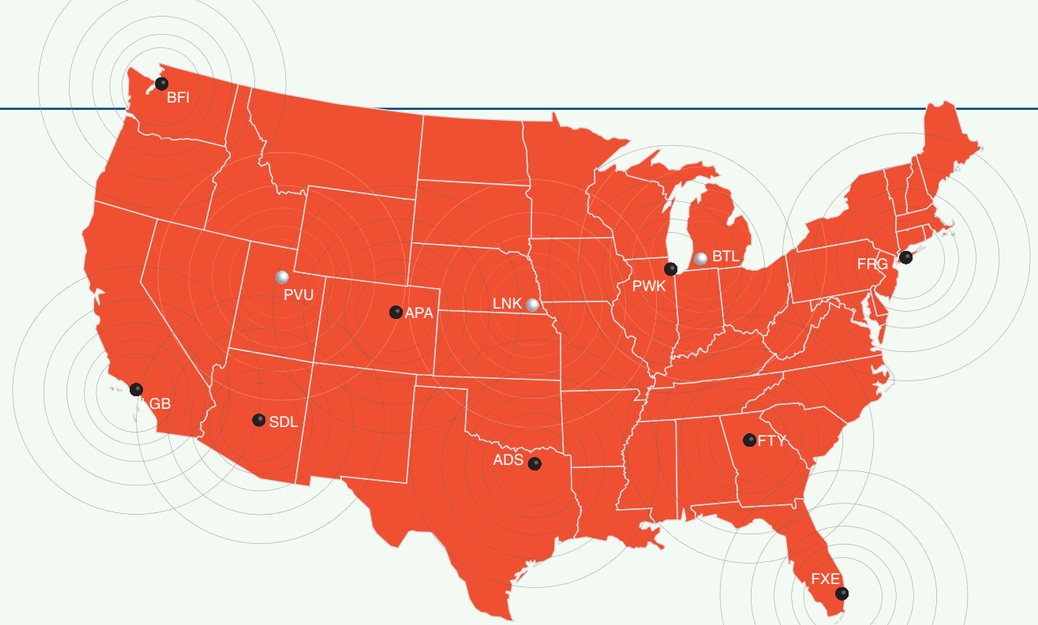
CHROME-FREE PAINT SYSTEMS FIELD GUIDE UPDATED

The start of 2014 marked the third year that nearly all aircraft painted at Duncan Aviation's Lincoln, Nebraska, and Battle Creek, Michigan, facilities were completed using FAA-approved, chrome-free paint processes. The mile marker spurred a review and update of Duncan Aviation's field guide, "Chrome-Free Aircraft Paint Systems," which was recently re-released on the company's website. The guide answers how and why aircraft paint processes are changing, what to look for when considering a provider, performance of these new products and waste disposal methods.

Because chrome-free products have continued to improve year after year, more business aircraft maintenance, repair and overhaul service providers are reviewing and considering the transition to chrome-free paint. Duncan Aviation Paint Manager Doug Bohac says unless customers ask for the chromate option, Duncan Aviation offers the "greener" chrome-free aircraft paint system when crafting a paint design and providing a paint quote. The paint team has received a positive response to this shift.

Doug says the paint team researched and tested green paint processes for nearly two years before implementing them in 2011. The chrome-free paint processes field guide is a compilation of their efforts and collaboration with Pantheon Enterprises.

"For customers who have come to rely on Duncan Aviation's quality and attention to detail, we want to address why they should make the switch without a regulatory mandate, and what we do to ensure the best paint job possible," says Doug. "The more information we can provide to our customers and those within the aviation community, the better."



NEW ENGINE RAPID RESPONSE LOCATION OPENED IN LONG BEACH, CALIFORNIA

Duncan Aviation officially opened its 10th Engine Rapid Response location at the Long Beach Airport (LGB) in Long Beach, California. Operators in the Southern California region now have more convenient access to Duncan Aviation's mobile engine services that include AOG support, most scheduled and unscheduled events, as well as engine R&Rs.

For many years, Duncan Aviation has been supporting southern California as far south as San Diego and east to Las Vegas, Nevada, through its Engine Rapid Response teams located in Scottsdale, Arizona, and Seattle, Washington. To better support the growing opportunity in this region, Joe Stubbs, a Duncan Aviation Engine Technician, is now based on-site at the Long Beach Airport within the West Coast Aircraft Maintenance facility located at 2881 E. Spring Street.

Joe, a veteran engine technician from Duncan Aviation's Lincoln, Nebraska, MRO, has several years of experience on both Honeywell and Pratt & Whitney engine models. He can be reached directly at +1 402.310.3176.

James Prater, Duncan Aviation Turbine Engine Services Manager in Lincoln, Nebraska, says Joe is the right person for the job. "Joe is the perfect fit to establish our base in southern California. His vast knowledge and experience across all engine and aircraft models, makes him a huge resource for this region."

Alfredo Garcia, General Manager of West Coast Aircraft Maintenance, welcomes Duncan Aviation to southern California. "Duncan Aviation delivers solid, reliable service. We are happy to have Duncan Aviation on-site to take care of all of our customers' engine inspections from start to finish."

Now that Duncan Aviation has an on-site presence with West Coast Aircraft Maintenance, Alfredo goes on to express the benefits to his customers and others on the airfield. "Since Duncan Aviation has set down roots in Long Beach, the company's quality work and dedication are now available without delay. This is excellent for West Coast as well as for everyone located at Long Beach Airport."

For emergency AOG engine services, contact Duncan Aviation's AOG Rapid Response Team network by calling 877.522.0111.

For a quote and pricing information, call Jon Dodson, Duncan Aviation turbine engine service sales rep, at +1 402.479.4250.

DUNCAN AVIATION NAMES SCOTT HEATH MANAGER OF AVIONICS SATELLITE IN SACRAMENTO, CALIFORNIA

Scott Heath has been named manager of the Duncan Aviation-Sacramento and Duncan Aviation-Hayward avionics satellites located on the Sacramento Mather (MHR) and the Hayward Executive (HWD) airports. Scott has been with Duncan Aviation since 1998, most recently serving as an avionics team leader the last 10 years for both the Fort Worth (FTW), and Dallas (DAL), Texas, avionics satellites. Prior to that, he worked as an avionics install technician at the Duncan Aviation MRO facility in Lincoln, Nebraska.

"We are excited to have Scott on board in Northern California," says Matt Nelson, Duncan Aviation's Avionics Satellite Manager. "He brings a great attitude, work ethic, wealth of knowledge and proven leadership to the table to continue to build our presence in this area."

Prior to joining Duncan Aviation, Scott began his aviation career in the United States Navy, completing his avionics training in 1991 at the Naval base in Millington, Tennessee, before spending time working with semiconductors and for Raytheon Aerospace as an avionics install technician.

Scott can be reached at +1 817.740.9266 or Scott.Heath@DuncanAviation.com.

DUNCAN AVIATION OPENS ON-SITE TEAM MEMBER HEALTH FACILITIES

Last August, Duncan Aviation opened team member health centers at its Lincoln, Nebraska, and Battle Creek, Michigan, facilities. Duncan Aviation Family Health is staffed by an on-site Physician Assistant (PA) and Nurse Practitioner (NP) who see Duncan Aviation employees and their families for scheduled appointments as well as drop-in care.

"Our health centers provide free preventative care services and urgent care for team members and their families," says Michael Cox, vice president of Duncan Aviation Human Resources. "Our ultimate goal is to detect serious health conditions through assessments and screenings early on, improving the overall health of our most valuable assets: our team members."

The primary and preventative healthcare services are available to all Duncan Aviation team members, as well as spouses and dependents age six and older who are covered by a Duncan Aviation medical insurance plan.

Marathon Health, one of the nation's leading providers of worksite healthcare, operates Duncan Aviation Family Health and provides care similar to that of a family physician. Services available include care for common illnesses or injuries, lab draws, routine physical exams and immunizations.

Duncan Aviation Family Health's Physician Assistant, Ingrid, consulting an employee about his health care needs.

"In addition to sick care, people have access to a full range of health assessment, coaching and disease management services for chronic conditions such as diabetes, heart problems or asthma. Appointments are set up in such a way to allow plenty of time for people to have quality time with the clinician, which is something that is often missing in today's medical community," says Wellness and Safety Coordinator Leta VanderVeen. "Our goal at Duncan Aviation is to help our team members achieve optimum health, and we know that partnering with Marathon Health and opening these centers will help us accomplish this goal."

> n. (Duncan Aviation Family Health): staffed by an on-site Physician Assistant (PA) and Nurse Practitioner (NP) who see Duncan Aviation employees and their families for free preventative care services and urgent care.

BOMBARDIER

AEROSPACE EXTENDS DUNCAN AVIATION'S AUTHORIZED SERVICE CENTER AGREEMENT

John Slieter
Duncan Aviation Vice President of Sales

Duncan Aviation's Authorized Service Center agreement with Bombardier Aerospace has been officially extended to include the Learjet 70* and Learjet 75* aircraft. With this addition, all of Duncan Aviation's full-service facilities in Battle Creek, Michigan, Lincoln, Nebraska, and Provo, Utah, are Authorized Service Centers for Learjet 40*, Learjet 45*, Learjet 60*, Learjet 70 and Learjet 75 aircraft.

Duncan Aviation maintenance technicians and technical representatives have received factory-authorized maintenance training on the Learjet 70 and Learjet 75 aircraft and are able to immediately begin performing scheduled and unscheduled warranty and maintenance work, including outstanding delivery items on new Bombardier* aircraft.

"Duncan Aviation has a long history with Learjet* aircraft, being named the first Learjet Authorized Service Center in 1967," says John Slieter, Duncan Aviation's vice president of sales in Lincoln, Nebraska. "We have built on this history and continue to have a great collaboration with Bombardier. We are proud to provide service for the entire Bombardier line of products. We are pleased with Bombardier's continued confidence in the quality and reliability of our services and find that this is a confidence shared by our mutual customers."

> n. (authorized service agreement): Duncan Aviation maintenance technicians and technical representatives can immediately begin performing scheduled and unscheduled warranty and maintenance work, including outstanding delivery items on new Bombardier* aircraft.

MIKE MORGAN JOINS INSTALL SALES TEAM

Mike Morgan recently joined the avionics installations sales team, where he will provide technical sales and quote support for avionics installation projects.

Mike started at Duncan Aviation's Battle Creek, Michigan, facility in 1996 as an avionics installation technician and, for the last five years, has been a team leader in the engineering department.

"Mike's knowledge of the latest in avionics systems is an asset that will benefit customers and prospects as they seek information about aircraft upgrades and identify the best avionics solutions for them and their aircraft," says Phil Suglia, Sales Manager for Duncan Aviation-Battle Creek. "We're excited to have him share his expertise with operators throughout the industry."

Mike started his aviation career in the United States Air Force as an avionics line technician stationed at Fairchild Air Force Base in Spokane, Washington. After his service, he attended Lansing Community College, where he obtained degrees in avionics technology and aviation maintenance technology.

Mike can be reached by email at Mike.Morgan@DuncanAviation.com or phone +1 269.968.8630.

BRIAN ANDREWS JOINS AIRFRAME SERVICE SALES TEAM

Brian Andrews recently joined the Airframe Service Sales team, where he will provide technical sales and quote support for airframe service projects.

Brian graduated from A&P school in 1998 and immediately joined Duncan Aviation's Battle Creek, Michigan, facility as an airframe technician. In 2007, he became a project manager, where he worked with customers and the service areas to ensure aircraft projects stayed on time and at budget.

"Brian has the technical expertise that comes with working as an A&P technician for nearly nine years," says Phil Suglia, Sales Manager for Duncan Aviation-Battle Creek. "Combined with seven years of working closely with customers and helping to plan and manage their service schedules, Brian has a great understanding of how best to meet customer needs and help provide them with the information they need to make informed decisions about their aircraft service work. We are excited to have him working to educate customers and prospects about the airframe services available with Duncan Aviation."

Brian can be reached by email at Brian.Andrews@DuncanAviation.com or phone +1.269.969.8408.

When you need a creative and detailed paint scheme applied on your aircraft, where can you find a team with the skill and drive to complete it beautifully? Meet Paint Master Specialists Troy Reinke and Stacy Finch, who have more than 35 years of paint layout experience combined.