



Featured Operator Rico Aviation



Richard Coon, CEO, Rico Aviation

Rico Aviation is an air ambulance and jet charter company operating from Amarillo International Airport, in Amarillo, Texas. They operate two Conquest II's for air ambulance and a Citation CJ2 for charter operations. Rico is CAMTS accredited, which is the highest level of air ambulance care obtainable. They operate within the continental US providing compassionate air ambulance care.

West Star Aviation completes all of Rico's maintenance for their entire fleet. West Star has completed overhauls on both Conquest plane engines, provided new paint, interior, and avionics, as well as performed SIDS on all aircraft.

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Controlled Airspace

Wow! 2011 already? Time truly does fly by. 2010 was an interesting year, to say the least. It was a year of challenges but also one of great successes.

As we look back at 2010, we can only reflect and realize that no matter the circumstances or challenges we all faced, one thing will always hold true. Aviation will always be a community that sticks together and welcomes one another as if no time has passed.

We want to thank all our customers that made 2010 possible and want all of you to know that West Star Aviation is a place you can always call home. Whether your maintenance requirements bring you to us or you are just in the neighborhood of one of our

facilities, please feel free to stop in and say hello and get to know the folks in the shop.

We know there are many facilities out there and they are all fine, but I am proud to be part of this one. We have the best people working here; you feel it as soon as you walk into the facility. We trust all our customers to provide us with all the feedback possible to make us better daily. We understand what it is to have someone say, hey when in Dallas, East Alton, Grand Junction and Columbia, check those guys out at West Star, they'll take care of you.

West Star Aviation only wants to do three things: build relationships, earn your business and most importantly, be a facility you know

will treat you with respect, dignity and professionalism. On behalf of all of us here in Dallas,

WELCOME TO TEXAS YA'LL!!
Alfonso Diaz
Dallas Operations Manager



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West Star's "Experience on Call" app for iPhone users. Our App provides you with easy access to contact all of our experienced professionals. Search for contacts by location, airframe, services and sales regions.



Featured Employee



Susie Corn
Regional Sales Manager, GJT

We are excited to honor Susie Corn, Regional Sales Manager for our South Central Region, as our featured employee. Susie has been with West Star Aviation since October 2005. Originally, she was hired as the Regional Sales Manager for Texas, then became the Dallas facility's Operations Manager in August 2008, Dallas Sales Manager in January 2010.

Susie's aviation career began at McKinney Aerospace in 1999. McKinney Aerospace was founded by KC Aviation originals and little did she know how iconic these gentlemen were in our industry until much later. Her first years there were as an accountant.

"For me, it is a genuine blessing to share my efforts daily with a wonderful group of aviation professionals who collectively understand our basic customer needs and continually strive to exceed these expectations in every way."

As a Regional Sales Manager, it is Susie's responsibility to develop and implement organized sales strategies to meet company sales goals for the South Central Region (TX, OK, LA, MS, AR) and report this information along with anticipated future sales figures to appropriate persons. She enjoys traveling to regional airports and trade shows to recruit new customers and ensure that our existing customers are receiving exceptional service

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Your source for product updates, handy tips and other information specific to your aircraft make/model.

Gulfstream Tips

GIV 793.750 Cap Angle Repair

CMP code 535201 F.S. 793 Aft Bulkhead Cap Angle NDT Initial inspection is due at 5000 landings. Recurring inspection is 2000 landings. Oftentimes we have seen the cracks before 5000 landings occur.

First thing to do is to remove the tail cone, vertical and horizontal stab, and then remove the

aft bulkhead at FS 826. Remove lower splice sections of frames at FS 800 and 806. Then remove the Rudder Torque tube box from aircraft to gain access to cap angles at FS 793.750. Then remove fasteners from cap angle at FS 793.750. Spin out cap angle through tail of aircraft which is made possible by removing lower section of frames at FS 800 and 806 as well



Gulfstream Tips continued on page 6

Learjet Tips

ATA Code: 21-30-00

Learjet 31A Model Takeoff Pressurization Bump Anomalies



It has been noted that some of the later Learjet 31A models experience intermittent, large transitional pressurization bumps shortly after takeoff rotation. Extensive work and testing has been accomplished on many of these aircraft in an effort to resolve the erratic takeoff pressurization bump anomalies, along with the replacement of numerous components in the

pressurization and bleed air system, but to no avail. What's more confusing about this situation is that the 31A-model pressurization system is for all practical purposes, identical to the later 35A/36A and 31-model "510" pressurization system, which seldom experience large transient pressure bump anomalies at takeoff.

Learjet Tips continued on page 4

Falcon Tips

Extra Savings On Falcon 2000 Heavy Maintenance

Having problems with Generators and GCU's paralleling on retrofitted Falcon 20-5 aircraft? Still having a problem in flight even after you have swapped GCU's and paralleling? West Star Aviation has discovered what may be causing this issue...a corroding contact surface

between the ground block and pylon structure. The contact surface between the ground block and pylon structure need to have 100 percent contact with each other for grounding purposes. What is happening is that corroding is taking place between the ground block and pylon



Falcon Tips continued on page 4

Citation Tips

CJ2-CJ3 Cabin Heat Issues



In the past 12 months West Star Aviation has had several instances where CJ2-CJ3 operators have had issues controlling the cabin temperature. The common problem has been lack of heat output at altitude which can lead to an uncomfortable flight for both passengers and crew. The system in both models is designed to operate automatically with slight adjustments

in cabin temperature and distribution from the crew to maintain optimum cabin temperature in both the cabin and cockpit.

This article discusses the temperature controlling function, and what West Star has discovered as the solution to this common problem. First, when operating the system, Cessna has advised

Citation Tips continued on page 4

Conquest Tips

Conquest I and II Product Roundup – What's Hot!

A lot of our Conquest I and II customers ask about new products in terms of "What are the other Conquest operators installing on their aircraft these days?" Conventional wisdom can be a useful tool to help decide whether to invest in a certain product. With that in mind, here are a few upgrades that our Conquest I and II

customers are currently installing at West Star. Some of these products were developed by West Star and some were developed by other companies, but all of them can be purchased and installed at any of our four maintenance locations in Grand Junction, Dallas, East Alton, and Columbia.



Conquest Tips continued on page 6

Hawker Tips

West Star Aviation has a New Modification for your Hawker Forward Fuselage Avionics Access Panels



A common problem on Hawker aircraft is having to access the avionics components that may be mounted behind the forward fuselage access panels. The left and right panels cut through the RVSM critical area around the static plates. Maintenance manual instructions require these to be "floated" above the panel mount flange

using pro-seal, be as close as possible to flush and can be no higher than .035" above the surrounding skin. There is also a limitation on the variation of the panel height on the four corners. Floating this panel can be a time-consuming process, costing additional labor hours and aircraft down time to be within the required tolerance.

Hawker Tips continued on page 4

Challenger Tips

West Star Aviation has developed tooling to pressurize and leak check your 10th and 14th stage plumbing while in the hangar. This provides an advantage over leak checking plumbing outside with the APU and engines running. Although they continue to check for leaks in this manner, using the in-hangar method allows them be in a quiet environment so they

can hear the leaks. The plumbing temperature is also cool to the touch in the hangar so they can safely feel for more leaks with bare hands, which enables them to easily find any leaks. West Star's equipment allows them to monitor the leak rate in sections of plumbing down to the 1/10th of a CFM. Using this same tooling, it is much easier to check operation of pneumatic valves and



Challenger Tips continued on page 6



Change the look of your interior with new wood work.

Do you want to freshen up the look of your interior on your aircraft? West Star Aviation can help with refinishing or creating brand new wood work for your aircraft. West Star has a variety of stains, grains, and wood species available. If you want to start from scratch, West Star can provide several options of wood that do not require staining. There are several benefits to choosing a wood that does not need stained.

First, it would require less downtime, which is an ultimate goal when having work done on your aircraft. Secondly, due to less work required, you will in turn save money. Another benefit is that non-stained wood is much easier to repair down the road when wear and tear on your interior wood becomes noticeable. Another great advantage to picking a wood that does not need stained is that there is the option to stain a logo or company name onto the wood. This gives a personalized and elegant touch to any interior.

Not everyone has the budget for a full re-veneer of their interior. West Star's wood shop craftsmen have all of the capabilities to sand down your existing wood work and give it a new finish, which when completed will look like new wood work. It is not uncommon to come across just one area of your aircraft that is used frequently and may be the only area that needs rejuvenating. West Star can also help with repairs focusing on just a galley or table.

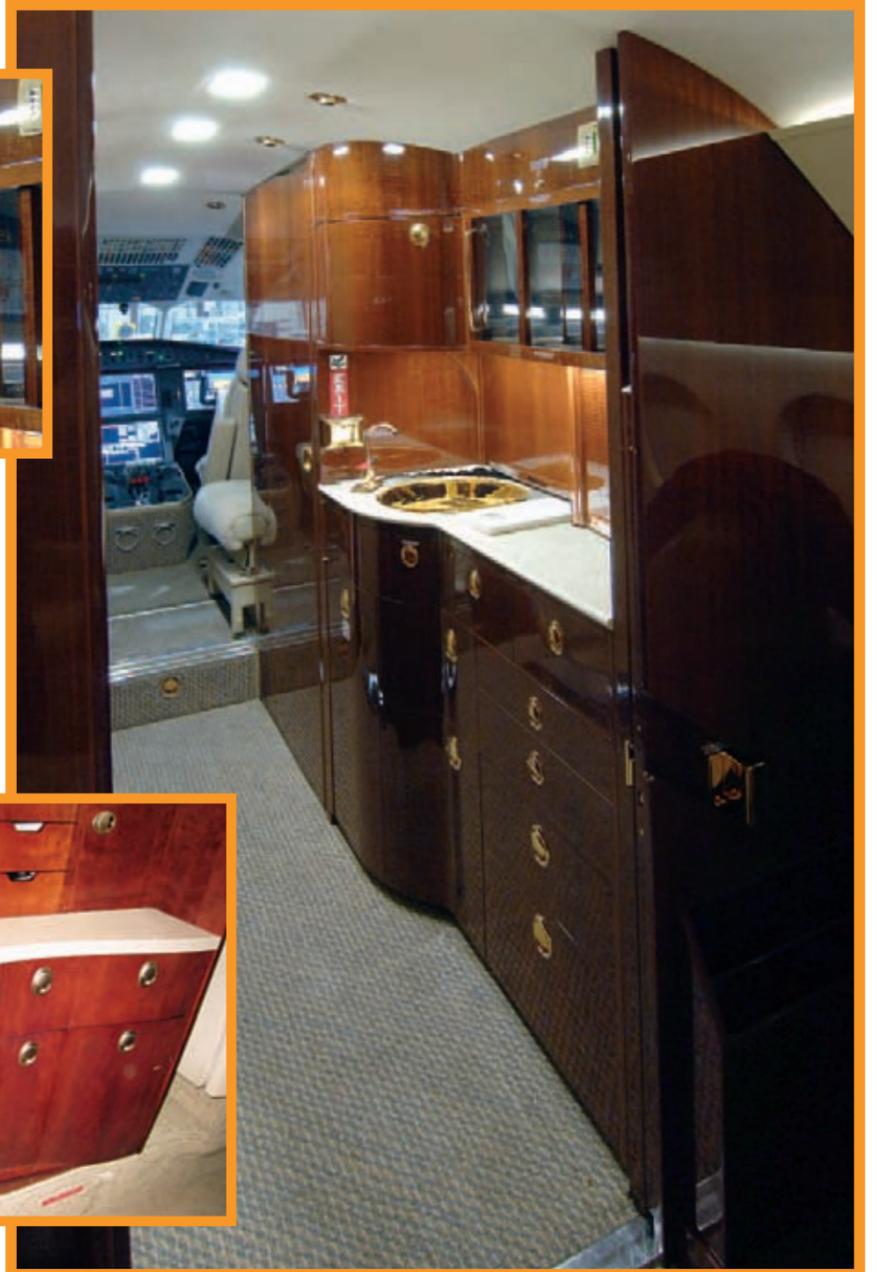
When updating or totally redoing your interior wood, don't forget the little extras that make your aircraft distinctive to your company. There are numerous ways that can be accomplished, by adding accents in either metal or wood to table tops or side ledges, embossed leather table inserts, metalwork embedded into your bulkheads, just to name a few. Our craftsmen are ready to work with you on your next project. ■



Falcon 900 interior above, to the right and left.



Falcon 50 Interior



Richard Coon, CEO, Rico Aviation

Featured Operator Rico Aviation

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"My experience with West Star Aviation has been EXCELLENT, which is why we spend the extra money to fly to Grand Junction for all of our aircraft maintenance needs," said Richard Coon, CEO, Rico Aviation. "Jim Otis, Joe Carr and their crews do a fantastic job on all three of our planes. Downtime is a very critical factor in the air ambulance business, because lives are at stake, and Otis and Carr really work hard to get us in and out as soon as possible. I can call on a moment's notice with a problem and I am always told to bring the aircraft to GJT. They get on the problem immediately and have me back in business fast."

"I can call on a moment's notice with a problem and I am always told to bring the aircraft to GJT."

Richard continues by saying, "I can't say enough about everyone at West Star. The entire company is GREAT, from the front desk people to all the mechanics, they take GREAT care of Rico and make us feel at home."

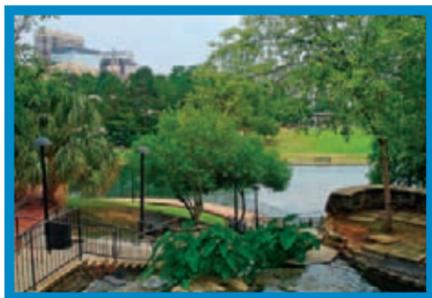
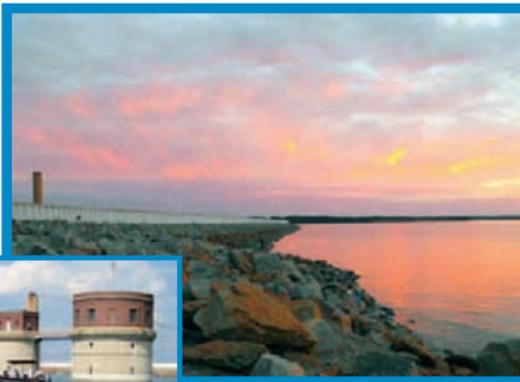
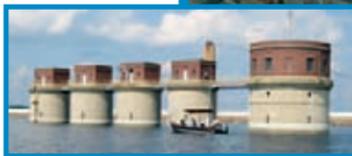
Rico Aviation plans on returning to West Star for future work on their aircraft. ■

Around Town in Columbia, South Carolina

The Zoo, Lake Murray, historic homes and Congaree National Park are but a few of the activities available.



**RIVERBANKS
ZOO
AND
GARDEN**



Around Town

Riverbanks Zoo & Botanical Garden

Located just 2 miles from downtown Columbia on a scenic site along the beautiful Saluda River. This is one of America's top zoos. The zoo is home to more than 2,000 animals that represent more than 350 species from around the world. Just some of the exhibits include elephants, tigers, bears, koalas, crocodiles, gorillas and much more. For more information visit www.riverbanks.org.

Visit South Carolina State House

The South Carolina State House is the state capitol building of the state of South Carolina. The building houses the South Carolina General Assembly and the offices of the Governor. The construction began in 1851 and was suspended in 1865 as Sherman's Union Army swept through Columbia on February 17th, burning much of the city. The State House was not finished until 1907.

The interior of the State House displays many portraits, plaques and other works of art, which honor historic people and events important to South Carolina's history. These works honor many of the people and events that are an important part of the history of South Carolina and the United States.

The South Carolina State Museum

Housed in the historic 1893 Columbia Mill textile building, the South Carolina State Museum tells the story of South Carolina through many exhibits and programs. The museum building and surrounding area abounds in history. The building itself is historical as it was the first electrically powered textile mill in the world. Visit the museum to enjoy art, cultural history, natural history, science and technology. The museum is just a few blocks from the State House building. www.museum.state.sc.us

Historic Homes

Columbia is home to several historic homes. Here are a couple we recommend visiting:

The South Carolina Governor's Mansion has been "home" to more than 30 governors and their families through the years. Built in 1855 as a residence for officers of the Arsenal Military Academy, the building was spared during the burning of Columbia in the Civil War. It was selected as the official residence for the state's governors in 1868. The public rooms are a repository of treasures - silver and china, furniture, paintings and documents - that remain permanently in the Mansion. The mansion is located on nine acres of land in downtown Columbia.

Kensington Mansion, located approximately 31 miles from downtown Columbia, makes an interesting day trip. Kensington Mansion was completed in 1854 and placed in the National Register of Historic Places in 1971. Located in lower Richland County, it is an architectural and historical treasure.

Lake Murray

The Dreher Shoals Dam, when completed in 1930, formed a 48,000 acre lake in the heart of South Carolina and only a short drive from downtown Columbia. At completion, Lake Murray was the largest earthen dam in the world. Lake Murray supplies hydro-electric power, is the major source of drinking water for the city of Columbia, and has become the water playground for the Midlands. The lake is very popular for fishing, boating, sailing and water sports. www.lakemurray-sc.com

Congaree National Park

This national park is located just 20 miles from downtown Columbia. It's rated a Top 10 Crowd-Free National Park by MSNBC Family Travel. The park has a 22,200-acre terrain. Congaree preserves the largest tract of old-growth floodplain forest in the whole of North America - giant hardwoods, lofty pines, and bald cypresses are just some of the roughly 75 species of ancient trees that form one of the world's highest natural canopies. Congaree National Park has an exhibit area within the Harry Hampton Visitor Center, a 2.4 mile boardwalk loop trail, over 20 miles of backwoods hiking trails, canoeing, kayaking, fishing and more. For more information you can visit www.nps.gov/cong/index.htm.

Citation Tips

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operators to warm the cabin prior to takeoff. When the aircraft is cold soaked, this prevents the cabin temperature from chasing the selected temperature.

The automatic temperature control system consists of a cabin temperature sensor, a duct temperature sensor, a temperature controller, an automatic temperature switch (rheostat) and a ram air valve. During operation in automatic mode the controller tries to maintain the same resistance between the cabin sensor and the duct sensor and adjusts the ram air valve accordingly to achieve the selected temperature. The ram air valve can also be operated by a manual temperature control switch when desired or if the automatic mode operation is not required.

The model specific maintenance manual has several tasks to check the function of the temperature control system to aid in troubleshooting using thermometers, decade boxes and multi-meters. One thing to keep in mind is that the goal of this system is to change the ram air valve position in order to change the temperature of the conditioned air entering the cabin. If the operator is having problems in both modes, manual and automatic, the ram air valve may be suspect. Upon reviewing the CESCO 50 report for both models West Star has learned that more than 30 percent of these models have had an unscheduled removal of the ram air valve which is the highest rate of any part in this system. For more information contact Pat Welch (ALN) 618-258-4751. ■

Learjet Tips

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One 31A-model customer has developed the following cockpit procedure that seems to help dampen these large transient bumps after takeoff:

After the cabin air switch is selected ON (at least 60 seconds before the aircraft is lined up on the runway for takeoff) and the aircraft has experienced its two cabin pressure bumps, reposition the pressurization module "rate selector" from the 9:00 o'clock position to approximately the 10:30 position. On takeoff rotation, the cabin will momentarily down-rate approximately 900 feet per minute and then swing back to an up-rate of approximately

2,000-fpm. The most noticeable part of the 31A-model pressurization bump anomaly is the second abrupt down-rate swing to approximately 2,000 to 3,000-fpm. This second large transitional swing seems to be the most noticeable to passengers and flight crews with sensitive ears. With the altitude controller rate knob set to the 10:30 position the second large down-rate bump should be reduced to approximately 500 to 800-fpm and then smoothly settle back to what the rate control knob is selected to. During climb out the copilot should then reposition the rate knob back to the 9:00 o'clock - 500-fpm setting for the remainder of the flight.

For more Learjet environmental system expertise, don't hesitate to contact Learjet Technical Specialist Danny Brown at 1-800-255-4193, extension 236 for any of your troubleshooting needs. If you don't already have a copy of Danny's technical brief "It's In The Bumps" covering the complete operation and troubleshooting of the Learjet 30 series "510" pressurization system, please give him a call. You may also contact Emily Mason at 970-261-1308 or Ken Rice at 970-261-4249 for more information. ■

Hawker Tips

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Some of our competitors in the industry offer a modification that alters the shelving in the nose structure and reverses the orientation of the avionics racks to allow them to be removed from the nose wheel well and avoids disturbing these access panels. A commendable but expensive idea.

Our approach to this issue is a little different and much more cost effective. Let's fix the access panels instead of the avionics installations.

We've developed a modification that installs permanent provisions making the installation of this panel much easier. If the area needs to be accessed, the panels go back down nice and flush with the surrounding skin the first time, every time using standard fastener torque values. We also take additional measures to ensure the area is weather tight and the sensitive underlying components are protected.

This modification is a fraction of the cost needed to change the orientation of the avionics components in the forward fuselage area, allows for quick access to the components and provides for fast restoration of the RVSM certification requirements.

For more information regarding this please contact Kendall Kreiling (GJT) 970-248-5244. ■

Falcon Tips

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structure, which is not allowing the 100 percent grounding and in turn is creating problems with generators and GCU's paralleling. In order to fix this problem, it is necessary to gain access to the ground blocks in the #1 and #2 engine pylon and clean the corroded area, which will allow the 100 percent contact that is needed. We have seen and fixed this on several aircraft, so if you have any reason to believe this may be an issue on your aircraft please contact one of our professionals. For more information, please contact Eric Kujawa (ALN) at 618-258-8855 or toll-free at 1-800-922-2421. ■



Falcon Generator Ground Blocks



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Flight Deck

Avionics Updates

West Star GJT Completes First Installation of Garmin G600 Package for a Conquest II

In December of 2010, West Star's Grand Junction (GJT) facility completed their first installation of the Garmin G600 Flight Display System in a customer's Cessna Conquest II. The G600 system was designed by Garmin for the retrofit market for aircraft weighing up to 12,500 pounds, and contains many of the features and capabilities of the popular G-1000 system installed in a variety of new aircraft – at a significantly reduced price.

According to Aaron Berg, West Star GJT Avionics Sales Representative, the G600 package is a perfect fit for the Conquest II. "The G600 system includes as standard equipment a lot of the features our Conquest II customers have been asking for like Synthetic Vision, FliteCharts, SafeTaxi, a built-in terrain elevation and towers database, and WAAS capability. Also, customers can select from a list of optional G600 features like Chartview that shows your aircraft position over Jeppesen charts, radar interface, XM weather and radio, traffic and terrain interfaces, and winds aloft data."

The most popular feature of the G600 display system is Synthetic Vision. It is best explained in the following excerpt from the Garmin G600 online brochure: "The available SVT synthetic vision feature uses sophisticated graphics modeling to create a virtual topographic landscape from the G600's terrain-alerting database. This enables the PFD to display a clear 3-D depiction of ground and water features, airports, obstacles and traffic – all shown in relative proximity to your aircraft. Instead of a flat blue-over-brown flight display, you'll see an in-depth perspective view of realistic terrain features rising into the sky. So, rather than looking at the PFD, you'll have a sense of looking through it – to "see" what lies beyond the nose of the aircraft. Fact is, the Garmin SVT presentation looks so real, it's almost like having a clear-day out-the-window view of your flight situation – even in solid IFR, nighttime VFR, or other low visibility conditions."

In addition, the G600 system includes a highly reliable and precise solid state AHRS and air data system, and it can be installed in any Conquest II equipped with the ARC1000 autopilot, the Collins APS-65 autopilot, or the Sperry SPZ-500 autopilot per the current Garmin Approved Model List (AML).

The Garmin G600 System and West Star RVSM Solution

West Star Aviation owns the STC to install their RVSM solution into Conquest II's that have the Collins APS-65 autopilot installed. Due to a high level of interest in the G600 system among Conquest II operators with the APS-65 autopilot, West Star is in the process of amending their RVSM STC for APS-65 equipped Conquests to include the installation of the G600 system. They are currently on track to have the STC amended in the first quarter of 2011. This first amendment will include Conquests with both the pilot's and co-pilot's side G600 displays

installed. A single-side G600 system supplemented with a Honeywell AM250 digital altimeter is planned for RVSM approval later in 2011.

If you are an operator with a 1000-series autopilot installed and you want to make an autopilot change, Collins still sells and supports the popular APS-65 for the Conquest II. Out of the estimated 50 APS-65 autopilots that have been retrofitted in the Conquest II fleet, West Star's Grand Junction facility has installed an estimated 90 percent of them. According to Berg, such experience is essential when installing autopilot systems. "You do not want someone with little or no experience trying to install an autopilot in your Conquest II and doing all the intricate interfaces to the existing avionics and aircraft systems. West Star's advantage is that we have done so many APS-65 installations, and we own the RVSM STC for Conquests with the APS-65 autopilot installed."

So, Just to be Clear . . .

Any Conquest II operator with an ARC1000, Collins APS-65, or Sperry SPZ-500 autopilot installed can install the Garmin G600 system. If you already have the Collins APS-65 autopilot installed or if you decide to purchase a new APS-65 autopilot, by the time you read these words West Star will likely have amended our RVSM STC so you can fly your G600, APS-65 -equipped Conquest II in RVSM airspace.

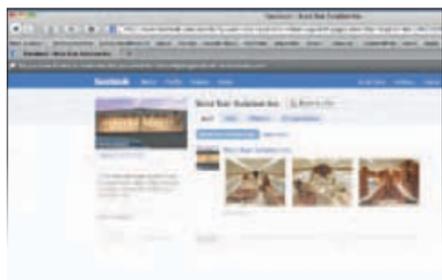
To learn more about all the G600 options available for your Conquest, contact Aaron Berg or Jim Pommier at our Grand Junction facility at 800-255-4193 or 970-243-7500. To learn more about the Garmin G600, view the online brochure that can be easily located by Googling "Garmin G600", or going directly to www.garmin.com/products/g600/. Be sure to explore the "Synthetic Vision Technology" link while you're there – and prepare to be impressed. ■



Garmin G600 Package for a Conquest II

West Star Aviation Inc. On Facebook

Become a West Star Aviation fan on Facebook! We have recently joined the Facebook community to create one more avenue of information for our customers. Check our continuous updates and stay current with West Star Aviation's developing news. ■



Featured Employee

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at every location. We can't forget that she also evaluates and monitors competitive information, which she says "keeps me on my toes." Susie added, "Last but not least, most importantly, I continually strive to enhance both my presentation and communication skills so that I may effectively comprehend our client's business needs to establish evident value added benefits in future business relations with West Star Aviation. Say that three times really fast!"

We asked Susie what she liked most about working for West Star. Susie said, "For me, it is a genuine blessing to share my efforts daily with a wonderful group of aviation professionals who collectively understand our basic customer needs and continually strive to exceed these expectations in every way. This commitment starts with our President and CEO, through our Executive Vice

Presidents, and positively filters through all of our company. Our leadership group is committed to helping each of us do our very best and genuinely care about both our combined and individual success. It is commonplace to advertise employee and customer commitment, however, at West Star Aviation the follow through is evident. West Star Aviation's success as an organization has been a result of our combined culture that simply starts with really caring about each person, customer or employee, and their successful journey. I am honored to share in this effort."

Susie said outside of the office, "My husband, John, and our two daughters, Hannah and Allie, enjoy spending our time together, preferably outdoors. We live about 60 miles northeast of Dallas, TX in a rural town out of the city limits. We have two awesome dogs

and a moody hamster that will randomly bite. During the spring, summer, and fall we spend many of our weekends camping at local state and federal parks. You will not find us in a tent as we prefer taking our basic travel trailer to accommodate the girls in our group which includes me. We enjoy fishing, walking the trails, visiting our neighbors, wild animal spotting, canoeing, paddle boats, swimming, playing outside games, grilling, and make the best S'mores while recapturing our awesome stories from the day at our evening campfire. I couldn't think of anything better or more fun than to spend my time with them. We truly enjoy one another!" ■

Conquest Tips

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High Intensity Discharge (HID) Xenon Landing Light System. Available for Conquest I and II aircraft, the benefits of this system include vastly improved night vision, removal of costly-to-maintain retractable landing lights, no time/airspeed/ temperature limits for operation, reduced electrical load, they can be used for landing lights or recognition lights, and they come with a five year warranty from Royal Atlantic Aviation, developer and supplier of the upgrade kit. If your Conquest has the longer outboard wing de-ice boots installed that reach almost to the wingtip, they will need to be replaced with the shorter boots to allow a clear area in the wingtip to install these HID lights. Operators can also add an HID taxi light option installed on the nose gear for dramatically improved night vision during taxi operations.

LED Anti-Collision and Position Lights. Conquest I and II operators can now make a quantum improvement in the "be seen" part of "see and be seen" with improved anti-collision and position lights using the much brighter LED lights offered by leading light manufacturer Whelen. Lighting options depend on your existing lighting configuration, type of wingtip installed, etc. Wingtip, tail strobe, and belly beacons are all available for retrofit, and the dramatic improvement in light intensity can't help but make you more recognizable in a crowd or in minimum visibility situations.

Aft Body Strakes. Aft Body Strakes developed by Aircraft Performance Modifications are still a hot seller for both the Conquest I and Conquest II airframes. These strakes improve the efficiency of the airflow over the aircraft's surface and add significantly to the stability of the aircraft, especially in turbulent air. According to the Aircraft Performance Modifications folks, the improved efficiency in airflow results in a 4-6 knot average increase in max cruise airspeed, and they increase the margin of safety with reduced stall speeds and better response in the event of an engine failure, as well as improved stability in single engine operation.

Auto Ignition. The head of a leading Conquest II flight training organization once said: "Every Conquest II should have auto ignition". Fact is, fewer than half the U.S. Conquest II fleet has it installed. This West Star STC'd improvement provides instant activation of the engine igniters when it detects a loss of torque in an engine due to a flame-out or other engine failure. This system, recommended by Honeywell (the engine manufacturer) and incorporated into all new TPE331 OEM engine applications, is fully automatic with a test switch to verify proper operation before flight and igniter monitor lights that tell the pilot when igniters are firing. And, operators still have the option of using the original OEM-installed ignition override function with auto ignition installed if they so desire.

Conquest II Dual Master Warning System. West Star's Dual Master Warning system is a safety enhancement feature that incorporates a large red annunciator light on the pilot and co-pilot panels to alert the busy pilot that one of the smaller annunciator lights is illuminated and a potential problem needs to be addressed. This is virtually the same system that was incorporated on all Conquest II's by the factory in serial number 441-0260 and on, and it is recommended by all the leading Conquest flight training facilities.

Conquest II Stainless Steel Exhaust Fairings. Over time, the original fiberglass composite exhaust fairings installed on Conquest II's tend to deteriorate due to constant exposure to extreme temperatures. West Star's stainless steel fairings are custom-fabricated to the aircraft and far exceed the original factory versions in performance and design. Polished to a mirror finish, these fairings will provide operators with years of trouble free service and will enhance the overall appearance of the aircraft.

Conquest II Engine Diagnostic System. Developed by Royal Atlantic Aviation, this "Engine Saver" system consists of a module of four annunciator lights (LH and RH Oil Bypass Lights and LH and RH Chip Detector Lights) that will advise the pilot of certain potential abnormal operating conditions for either engine. The system is designed to provide indications of both ferrous and non-ferrous particles that may be the first indication of a potential engine problem. The oil filter bypass lights illuminate to indicate that the respective oil filter has bypassed, as detected through a sensor mounted on the side of each engine. The chip detector annunciator lights are illuminated if a fine metallic part is drawn to an engine-mounted magnetic sensor. These products not only enhance the safety of flight, but could also result in significant maintenance savings if a potential problem is detected and addressed early.

Conquest II Gross Weight Increase. Many Conquest II operators have increased the gross weight of their aircraft from the original factory-certified gross weight of 9,850 pounds to a maximum of 10,340 pounds (maximum weight gain of 490 pounds) through the incorporation of two STC'd kits offered by Aeronautical Testing Service. The first kit includes the installation of vortex generators installed on the top of the inboard wings, and affords the operator a weight increase of 315 pounds. Installation of the second kit incorporates new main landing gear metering pins, and offers the operator an additional gross weight increase of 175 pounds. The combination of both kits affords the operator a total gross weight increase of 490 pounds.

Conquest II Windshield Deice Control Valve. This modification developed by Royal Atlantic offers Conquest II operators a manual pilot-controlled cutoff valve in the event of a windshield overheat situation. If an overheat condition exists, the pilot will receive a red visual warning light. If the light stays on, it is an indication that the normal shutoff system has failed. The system offers a manual cut-off to give the pilot control over this potential overheat condition.

Conquest I Blackhawk XP135A Engine Conversion. Conquest I operators can increase your rate of climb dramatically and increase cruise speeds by up to 30 knots by having West Star install factory new PT6A-135A engines from Blackhawk Modifications, Inc. They also offer credit for every hour remaining until overhaul on your original PT6A-112 trade-in engines, which can make the Blackhawk XP135A upgrade option attractive even if you are not coming up on overhaul on your original engines. Blackhawk also offers the most cost effective electronic torque indicating system for the Conquest I, and you can install it on the original PT6A-112 engines or on new Blackhawk PT6A-135A engines.

Conquest II RVSM Solutions. Approximately 30% of the Conquest II fleet has an RVSM solution installed allowing them to operate in RVSM airspace at FL290 and above. West Star can provide an RVSM solution for Conquest II's with any type of autopilot installed. We own RVSM STC's for Conquests with the Collins APS-65 and Meggitt 2100 autopilots installed, and have access to RVSM solutions for Conquest II's with the ARC1000 and Sperry SPZ-500 autopilots installed.

Interestingly, many of the most popular upgrade products today help improve the safety of your Conquest I and II operations. And in the grand scheme of things, they are relatively inexpensive for the great benefits they offer.

Contact Dave Girard at West Star's Grand Junction facility for more information at 800-255-4193 or direct at 970-248-5250, or e-mail Dave at dgirard@wsa.aero. ■

Gulfstream Tips

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as aft bulkhead at FS 826. This saves a lot of time instead of removing the upper aft fuselage skin. Removing the Rudder torque box assembly also gives you better access to installing required fasteners and angles that need drilled up at FS793.750 since you are installing a stainless cap angle, which is thinner in place of a two-piece cap angle.

All GII, GIII, and GIV have an original two-piece aluminum cap angle. Gulfstream has authorized replacement of the cap angle with a stainless steel one piece assembly which is used on the G350 and G450. Using stainless should increase the strength in the areas that are normally cracked.

For more information regarding this cap angle repair you may contact Eric Kujawa (ALN) at 618-258-8855 or toll free at 800-922-2421. ■



Challenger Tips

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valves for leak through when closed. This tooling provides a much more efficient and accurate process for leak checks.

If you are experiencing cabin airflow issues or poor take-off engine performance you may want to consider a thorough inspection of your plumbing for leaks and proper valve operation. Whether you have it accomplished during your next major inspection, or scheduled separately, it will save you money and time trying to find the source of any leaks. West Star

performs heavy maintenance, including every major inspection required on the Challenger airframe, we accomplish the Challenger landing gear restoration in-house, we have full avionics installations and repair capabilities, and accomplish custom paint & interior refurbishments.

Please contact Emily Mason at 970-261-1308 or Todd Burkey at 970-985-0774 for further information. ■

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