Drone conflicts surge, FAA threatens action
by Kerry Lynch

Concerned that pilot reports of drone sightings have already nearly tripled in the first eight months of this year, the FAA stepped up its warnings about potential fines and jail time for unauthorized uses. The agency noted that pilot reports of drone sightings have skyrocketed from 238 in all of last year to 650 through early August this year. It received reports of 16 drone sightings in June 2014 and 36 in July 2014. This year, the number of pilot reports leapt to 138 in June and 137 in July.

The agency said the reports have come from pilots flying a range of aircraft types and many have seen drones at altitudes of up to 10,000 feet. Recreational unmanned aircraft systems (UAS) have interfered with firefighting efforts, approached airliners and helicopters, and injured people on the ground, the FAA added. The U.S. Forest Service, which has been posting no-drone warnings in firefighting areas, said pilot reports have nearly tripled in the first eight months of the year. "If a UAS is detected flying over or near a wildfire, we will stop airtankers from dropping fire retardant, helicopters from dropping water and other aerial firefighting aircraft from performing wildfire-suppression missions until we can confirm that the UAS has left the area and we are confident it won't return," said Steve Gage, U.S. Forest Service representative on the Hanscom GIV crash docket: OEM and owner at odds
by Nigel Moll & Robert P. Mark

The fatal crash of a Gulfstream IV attempting to take off from Boston-area Hanscom Field on the night of May 31 last year is a standout among business aviation mishaps for numerous reasons, all of which were up for discussion and speculation in the immediate aftermath of the tragedy: flight-control problems; pilot judgment; their apparent failure to adhere to required procedures; and the design effectiveness of a cockpit safeguard intended to prevent such a disaster.

The NTSB has yet to issue its final report on the probable cause of the accident but in the meantime, on July 31, GIV manufacturer Gulfstream Aerospace sent a 58-page “party submission” to the NTSB’s evidence docket—ERA14MA271—that Board members will consider in the process of arriving at their final finding. Gulfstream’s contribution to the docket (http://dms.ntsb.gov/pubdms/searchdocument.cfm?docID=430144&docketID=57175&docketID=89324) makes for sobering reading.

The owner of the GIV, N121JM, filed a “non-party submission” to the docket as well (see page 36), in which it portrays the accident in a different light.

The accident claimed the lives of the two pilots, the flight attendant and all four passengers. The captain was the pilot flying when the aircraft failed to leave the ground and went off the end of Runway 11 at speed after the attempt to take off at BED was aborted.

In its submission Gulfstream (Continues on page 36)

Hanscom GIV crash docket: OEM and owner at odds

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In its submission Gulfstream (Continues on page 36)
OUR SIGHTS ARE SET HIGHER

BUSINESSAIRCRAFT.BOMBARDIER.COM/AIN

BOMBARDIER
the evolution of mobility
SPECIAL REPORT
THE NO-PILOT COCKPIT
Can a properly programmed computer do a better job of flying an airplane than a human? Aircraft could become more autonomous in the future, but pilots are not going to be replaced in the near or distant term. For now avionics makers are focusing on technology that can truly collaborate with the pilot.

28 Associated STCs 757 Fans Approval brings Fans/CPDLC to the out-of-production aircraft.
28 Brazil Garmin dealer named Helpark can buy avionics from the factory.
28 Learjet 60 ATRS STC’s Avion can replace the aircraft’s original AHRS with the Collins AHC-3000A.
28 Second-quarter sales gain Sales figures were up over the first quarter but down from Q2 2014, reports AEA.
28 SkyVector flight-plan filing The capability is the latest for the online flight-planning portal.

CHARTER and FRACTION

18 Flexjet accelerates G450 deliveries The frac provider will take the next two aircraft this fall rather than next year.
46 New tenant for P&G ‘Hangar 4’ Reynolds Jet is leasing the facility at Cincinnati Lunken Field at least through 2027.

14 FAA reauthorization, beyond ATC Streamlining the certification process and improving safety remain top goals.
38 BAOA appeals for new categories If Indian aviation is to grow, the government needs to treat commercial and business aviation differently, says the industry group.
42 Customs tuning in to bizav A working group will raise the visibility of the issues specific to the industry.
60 FAA on GA’s most wanted changes Revisions to the third-class medical and Part 23 are key for users, but FAA action is slow.

6 Legacy 450 approved in Brazil FAA OK planned for ‘coming weeks.’
34 GE mulls U.S. turboprop MRO The H series engines currently need to be shipped to the Czech Republic for overhaul.

Airline News

6 46-300 takes to the skies The reconstituted recycled jet makes its first flight.
14 Flexjet accelerates G450 deliveries The frac provider will take the next two aircraft this fall rather than next year.
18 New carrier on the...
Bizjet deliveries down in first half
by Curt Epstein

Business jet deliveries worldwide remained sluggish through the first half of this year, declining by more than 4 percent from the same period last year, while overall airplane billings shrank by half a billion dollars, to $10.4 billion, according to statistics released by the General Aviation Manufacturers Association (GAMA).

OEMs handed over 305 jets in the first half, 13 short of the pace in last year’s first six months. However, the second-quarter delivery tally of 172 jets represented a healthy gain over the 133 deliveries in the first quarter and an improvement over the 164 private jets in last year’s second quarter.

Some industry analysts are rethinking their 2015 delivery predictions in light of the new numbers. Rolland Vincent, director of JetNet’s iQ forecasting product, said the company is downgrading its prediction of approximately

Continues on page 55

Turbine Commercial Helicopters Worldwide Deliveries 1H 2015 vs. 1H 2014

<table>
<thead>
<tr>
<th>Mfr./Model</th>
<th>1H 2015</th>
<th>1H 2014</th>
<th>%Chg.</th>
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<tr>
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<td>Total</td>
<td>23</td>
<td>29</td>
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*Sikorsky’s reported 2014 delivery totals did not specify helicopter models.

Turbine Business Airplanes Worldwide Deliveries 1H 2015 vs. 1H 2014

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<th>Mfr./Model</th>
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<th>%Chg.</th>
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<td>ACJ320*</td>
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<td>ACJ321*</td>
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<td>ACJ330*</td>
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<td>100%</td>
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<td>0</td>
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<tr>
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<td>TBM 900</td>
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<td>Embraer</td>
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<td>100%</td>
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<td>8</td>
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<td>King Air 350/ER</td>
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<tr>
<td>Grand Total Jets/Turboprops</td>
<td>419</td>
<td>426</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>

*Denotes green aircraft deliveries • *Piaggio will report deliveries at year-end.

Dassault will no longer specify delivery totals for individual models.

As we go to press

FREEMAN GROUP EYES NETWORK EXPANSION
Freeman Holdings Group, the largest licensee within the Million Air network, secured a $500 million line of credit last month that will be used to expand its current portfolio of 12 FBOs through both organic growth and acquisitions. “With the current cost of money, we feel it is advantageous for us to develop some of the capital available to us to continue fueling our aggressive rate of growth,” said Freeman Group CEO Scott Freeman. “We intend to be an aggressive participant in the acquisition arena in the coming months in hopes of finding new locations and markets that will complement our current portfolio.”

EXPECT TFRs FOR PAPAL VISIT
The FAA released a flight advisory on August 20 saying it is planning to issue one or more TFRs covering the Pope’s planned visit to Philadelphia on September 26 and 27. While the advisory does not detail all the anticipated restrictions, it does specify a number of activities and types of operations that will be banned, including model aircraft, unmanned aircraft, aerobatic maneuvers, gliders, parachute operations, ultralights, lighter-than-air (balloons), agricultural type spraying, banner towing, utility/pipeline patrols or aircraft/helicopters operating from a ship or yacht. Philadelphia is one of three cities the Pope is scheduled to visit between September 22 and 27. The others are Washington, D.C., and New York. Pilots should expect TFRs at all three locations.

FLEXJET TO REINSTATE IATB ORGANIZING COMMITTEE
On August 19, an arbitrator ruled that three union-organizing Flexjet pilots terminated by the fractional provider earlier this year be reinstated and paid back pay, according to Teamsters Local 1108. The pilots are members of the Flexjet Pilots Organizing Committee and working to form a union with IATB Local 1108, which represents the pilots at Flexjet sister company Flight Options. Following the pilots’ terminations, the IATB Airline Division filed suit in federal court. Under a confidential settlement, the parties agreed that the matter would be heard before an arbitrator. “The arbitrator found the terminations were without cause and that the pilots’ terminations resulted from retaliation for protected union activity in violation of federal labor law,” the union said. Flexjet chairman Kenn Ricci disagreed with the arbitrator’s findings, but said the company will abide by the ruling.

WEST STAR PLANNING CHATTANOOGA MRO
West Star Aviation will be opening a new FBO at Chattanooga (Tenn.) Metropolitan Airport. Its 20,424-sq-ft facility
For 13 consecutive years, aircraft operators have voted Gulfstream number one in product support. This achievement reinforces our steadfast commitment and, more importantly, your confidence. To the customers who inspire us and the employees who power us, we thank you. When it comes to service experience, choose the best. Gulfstream Product Support: Consider it Done.
Argus: July Activity Marks Recent High
North American business aircraft activity in July reached the highest level since February 2012, according to the latest report by market analyst Argus. The Argus July TracPak Business Aircraft Activity report, which tracks IFR activity in the U.S. and Canada, shows flight activity in the sector in July up 3.7 percent over June and 5.6 percent over July 2014. The fractional market showed its first year-over-year increase (2.8 percent) since November 2014. Part 135 activity showed the greatest increase over last year at 9.6 percent. Turboprops marked the greatest improvement, up 7.6 percent. Large-cabin aircraft were up year-over-year by 7 percent. Argus expected the improvements to continue last month, estimating a 4-percent increase in year-over-year flight activity overall.

Beechjet Flameout Mirrors Past Incidents
A Colombian-registered Beechjet 400A glided to a safe landing at Palanquero Air Base, Colombia, after suffering a dual-engine flameout during a July 28 flight from Fort Lauderdale-Hollywood (Fla.) Airport to Bogotá International Airport, according to a preliminary report from Colombia’s Grupo de Investigación de Accidentes y Incidentes. Registered as HK-4756, the twinturbojet was starting its second leg into FL450; both engines flamed out at 44,800 feet while it flew through a maturing convective storm cell. After failed attempts to restart the aircraft’s engines, the crew performed a controlled descent and glided the aircraft to a safe landing. On the ground one engine was restarted, allowing the jet to taxi and land at its own power. A post-incident test showed that both engines were in operating condition. This marks the fourth known-flameout incident involving a Beechjet 400A. An NTSB final report into a June 2006 incident found that accretion of high-altitude ice crystals on the compressor vanes and their ingestion into the engine high-pressure compressor caused both engines to flame out when the pilots pulled back the power levers.

NetJets Revenues Climb, Earnings Stumble
A 62-percent increase in aircraft sales helped NetJets revenues climb 16 percent in the second quarter and 6 percent in the first half, parent company Berkshire Hathaway reported. But those returns were tempered by lower flight operations revenues that came from lower fuel cost recoveries and unfavorable foreign currency effects, the company said. That, coupled with other general/administrative expenses such as aircraft cancellation fees, led to a 17-percent decline in earnings in the second quarter. NetJets earnings, however, are still up 14 percent for the first half, Berkshire Hathaway said.

Equus Markets SSBJ in Latin America
Supersonic business jet developer Aerion appointed South Florida-based Equus Global Aviation its exclusive authorized sales representative for Central and South America, including parts of the Caribbean, and Mexico. Aerion is targeting first flight of the three-engine, $120 million SSBJ in the 2019 time frame, with entry into service expected in 2022.

Fourth Baltic Bizav Forum Held in Latvia
More than 60 delegates from Russia and Europe attended the fourth-annual Baltic Business Aviation Forum that was held in Latvia last month. Presentations at the event largely focused on the current challenges facing the industry in the Baltic States and throughout the region. This included an update on the market for business aircraft sales, challenges posed in recruitment and Eurocontrol’s support of aircraft operators within the framework of aircraft emissions reporting.

Global 7000 faces two-year delay
by Kerry Lynch
Citing development complexities, Bombardier is pushing back the Global 7000/8000 program by two years. At the same time, the Canadian airframer detailed plans to cut production of the existing Globals—the 5000 and 6000—by roughly 30 percent.

When Bombardier unveiled the Global 7000 in May 2010 it hoped to begin delivering the large-cabin, long-range 7000 next year. Now the company expects to deliver the first 7000 in the second half of 2018. In a briefing for financial analysts in late July, the company did not specifically mention a revised timeline for the Global 8000, which is slightly shorter and has longer range of 7,900 nm, but the original schedule had the 8000 entering service a year after the 7000. Global 7000 can climb to FL450; both engines flamed out at 44,800 feet while it flew through a maturing convective storm cell. After failed attempts to restart the aircraft’s engines, the crew performed a controlled descent and glided the aircraft to a safe landing. On the ground one engine was restarted, allowing the jet to taxi and land at its own power. A post-incident test showed that both engines were in operating condition. This marks the fourth known-flameout incident involving a Beechjet 400A. An NTSB final report into a June 2006 incident found that accretion of high-altitude ice crystals on the compressor vanes and their ingestion into the engine high-pressure compressor caused both engines to flame out when the pilots pulled back the power levers.

Bellemare told analysts that the company has significantly ramped up Global production after receiving some large orders. Production had reached a rate of “80ish” a year, but a rate of 50 to 60 aircraft a year is more sustainable over time, he said. “We made the right call” on the production cuts. Bellemare said, noting that weakness in Russia, China and Latin America hurt second-quarter orders.

The extent of the Global 7000 delay and production cuts did not come as a surprise. Rolland Vincent, Embraer’s executive vice president and JetNet iQ director Rollie Vincent said the announced plans are “entirely in line with our analyses.” He noted that the original production ramp up “was an internal decision and not reflective of overall market growth, in our view.” While the market has improved, “demand certainly did not increase at that rate. We think the production output changes were influenced by a need to increase cash flow to finance new aircraft development programs.”

Events

EMBRAER LEGACY 450 WINS BRAZILIAN APPROVAL
Embraer received type certification for its “mid-light” Legacy 450 from Brazil’s civil aviation agency, Agência Nacional de Aviação Civil (ANAC), on August 11. The company also announced that the twinturbojet has exceeded several of its guaranteed performance specifications.

Two Legacy 450s participated in the certification effort, the first outfitted with flight-test instrumen-
tation and the second with a production-conforming interior. Production of the Legacy 450 has begun and the first delivery is scheduled for the fourth quarter of this year. Embracer Executive Jets president and CEO Marco Túlio Pellegrini noted that the final version the Legacy 450 has better range (2,575 nm versus 2,500 nm) and field performance (takeoff distance is 175 feet less, at 3,825 feet, and landing distance is 217 feet shorter, at 2,083 feet) than originally promised.

Embraer expects to receive FAA certification for the Legacy 450 in the “coming weeks,” with EASA approval to follow that. By Kerry Lynch

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FAA seeks solutions to ADS-B privacy quandary
by Kerry Lynch

The FAA is weighing proposals to tackle one of business aviation’s chief concerns surrounding the implementation of automatic dependent surveillance-broadcast (ADS-B) and the Jan. 1, 2020 ADS-B equipage mandate: privacy. A general aviation working group that was part of the larger ADS-B Equip 2020 panel recently delivered a white paper to the agency outlining potential approaches to handling aircraft and operator privacy and security concerns surrounding mode-S transponders. According to the white paper, “The core concern of the operator community is real-time tracking of the geographic location of a specific aircraft.” ADS-B-equipped aircraft transmit unique identification and position information either through the 1090-MHz extended squitter mode-S transponder (for all altitudes) or the 978-MHz Universal Access Transceiver (UAT) below 18,000 feet.

The extended squitter or ES format can carry up to 49 parameters compared with three for mode-C and seven for ordinary mode-S. “The extended squitter message is broadcast rather than response to an interrogation and includes the ICAO address in each broadcast message,” the white paper noted, hence the key difference between an ordinary mode-S transponder and ADS-B (UAT).

Business aviation leaders have expressed reservations about the mandate because the 1090 MHz mode-S transponder identification codes can easily be detected, tracked online and traced to the operator, bypassing protections established in the former Block Aircraft Registration Request program. The code, a 24-bit address assigned to each U.S. aircraft registration number, is sometimes referred to as the aircraft’s “DNA address.”

The tracking ability has been available for some time, in any mode-S-equipped aircraft whether ADS-B enabled or not, but that ability has grown in recent years as the number of ground stations (or listeners) has increased. The FAA noted Jens Hennig, vice president of operations for the General Aviation Manufacturers Association (GAMA). These stations can be acquired for about $100, and hobbyists and flight-tracking companies have strung together a global network that can keep track of any mode-S-emitting aircraft. The information gathered from the so-called listening stations is readily accessible on the Internet.

Ensuring Privacy and Security

GAMA has called privacy and security concerns one of the chief stumbling blocks for ADS-B equipage. “In transitioning to satellite-based navigation and surveillance, we need to find a way to make accommodations for privacy, security and competitiveness, and we want to ensure that concern is addressed as ADS-B moves toward implementation,” president and CEO Ed Bolen told a NextGen Advisory Committee meeting earlier this year. “When it comes to ADS-B, we continue to believe that people should not have to surrender their security just because they board an airplane.”

The working group looked at several possibilities for addressing these concerns. These included making the FAA’s Aircraft Registry private. GAMA had offered that as a solution late last year, but the FAA responded that might not be possible given Freedom of Information Act requirements. Also, the agency was concerned that it is signatory to the Cape Town Convention that established the International Aircraft Registry. This registry is important for financial interests.

A second solution was to step up the anonymity of registered aircraft owners through LLCs or trust corporations. FAA data shows approximately 10,000 aircraft are registered through trust corporations. But even with the veiled names of a trust corporation or LLC, careful mining of public records can unearth the ultimate owner.

Another possibility discussed was developing an anonymity mode for the 1090ES data-link. The anonymity mode exists for the 978UAT standard, but is not part of the 1090ES standard. This was purposefully omitted for 1090ES after objections were raised by Europe, the working group said in the white paper. But other options presented by the working group might gain more traction. A longer-term option would be encrypting the mode-S 1090ES datalink. The FAA is looking at potential future changes to the operational performance standard (RTCA DO-201B), such as expanding the bandwidth, which might enable functions such as encryption. The changes, which would be under DO-260C, are not expected to be completed until after 2020. Also, it is uncertain whether encryption will require fundamental design changes, whether it would be practical, and whether it would truly achieve the privacy goal. The RTCA is looking into the technical feasibility of this option, said Doug Carr, NBAA vice president of regulatory and international affairs.

To address concerns in the shorter term, the working group discussed the establishment of a “privacy office” to administer the mode-S address codes and possible anonymous flight identifications. The group suggested that aircraft could regularly (daily or monthly) change codes if necessary; at present the codes in the U.S. are static. NBAA has agreed to review mechanisms for making such changes and the frequency with which the codes would need to be changed.

Technical Questions

Several technical questions raised by this option need to be ironed out, including the capability of existing transponders to change their assigned address and whether this would require a maintenance or pilot action. GAMA is exploring potential prospects for this option. Also, the FAA would need to determine whether frequently changing an aircraft’s code has system implications.

Many unknowns remain for these options, including the cost to the operator or to the government. Carr stressed that the industry doesn’t have enough information yet to determine whether they are feasible. However, he added that changing the code or encryption “could be very effective.”

In the interim, the FAA has been open to suggestions, eager to encourage equipage. The number of aircraft equipping has accelerated. More than 13,000 are now ADS-B out compliant, and all but 200 to 300 of those are business and general aviation aircraft. That is up from just a few thousand a year ago, but how many thousands more that have yet to equip is unknown. Estimates vary, but all exceed 100,000.

The costs to equip have come down significantly, but many owners continue to wait to make sure costs and more don’t change. It is also hard to see if outstanding issues get resolved, to ensure that a solution is available for their aircraft or to see if prices drop further. Installers are already reporting bookings in 2017, 2018 and 2019, Hennig said. The 2020 deadline is not going to change, he reiterated.
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**Gulfstream: What Bizjet Slump?**

During a second-quarter investor call, General Dynamics chairman and CEO Phebe Novakovic dismissed “speculation” and “rumor intelligence” by competitors of a slumping business jet market. She noted that subsidiary Gulfstream Aerospace “had its best second quarter [for new aircraft sales] since 2008.” The company’s order book grew by nearly $1 billion in the quarter, to $14.02 billion, reflecting strong demand across Gulfstream’s product line. Gulfstream delivered 41 completed jets in the quarter, three more than in the year-ago period. Large-cabin jet shipments soared by seven aircraft, to 33, while midsize jet deliveries fell by four aircraft, to eight.

**Cutter Aviation Teams with Go Rentals**

Southwestern U.S.-based FBO chain Cutter Aviation entered into an exclusive partnership with Go Rentals to provide rental vehicles for passengers and flight crewmembers flying into Cutter’s locations at Phoenix Sky Harbor International and Deer Valley Airports in Arizona. The Go Rentals fleet ranges from compact Toyota and Honda sedans to luxury-spec Audi, Cadillac and Mercedes-Benz cars and SUVs.

**Textron Bullish on Bizjet Market**

Textron chairman and CEO Scott Donnelly is optimistic about the outlook for Textron Aviation, as the dominant North American business jet market remains “fairly strong,” he said during a second-quarter investor conference call. Donnelly categorized the business jet market in Russia and China as “weak” and said that Latin America and Europe are “very challenging.” During the quarter, revenue at Textron Aviation slid $59 million year-over-year, to $1.124 billion, attributable to fewer deliveries of King Airs and jets. However, it did log a quarterly profit of $88 million, up $60 million from a year ago. Backlog at the end of June was $1.4 billion, up $145 million from March 31.

**API Gets EASA OK for BBJ Winglet**

The EASA approved the Aviation Partners Split Scimitar Winglet on Boeing Business Jets. The approval follows U.S. FAA supplemental type certification in April. The split winglet retrofit involves the addition of a scimitar-tipped large ventral strake to Aviation Partners’ blended winglet, replacement of winglet tip caps with new scimitar tip caps and strengthening of the internal winglet structure. The result, according to the company, is reduced drag and a range increase.

**Rosekind Replacement Named for NTSB**

The White House nominated former Massachusetts Bay Transportation Authority (MBTA) chief Beverly Scott to become the next NTSB member. If confirmed, Scott would serve a term through Dec. 31, 2019, filling the vacancy created when former member Mark Rosekind left to become the administrator of the National Highway Traffic Safety Administration in December.

**‘Air Cocaine’ Pilots Sentenced**

Pascal Fauret and Bruno Odos—the pilots of Dassault Falcon 50 F-GXMC that was caught with 1,500 pounds of cocaine on board in Punta Cana, Dominican Republic, in March 2013—have been sentenced to 20 years in jail by a Dominican tribunal for their “connection to commit international drug smuggling.” Their lawyer intends to appeal the decision and they are free until the appeals trial. The jury’s decision also includes the confiscation of the aircraft. The pilots—and the two passengers—maintain their innocence. The $26 million drug bust has become known as “Air Cocaine.” The operator was Lyon, France-based Aeropolis Corporate.

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**AAIB: Taws warned Phenom 300 crew**

by Nigel Moll

The Embraer Phenom 300 that overran the runway at Black-bush Airport in southern England on July 31 received multiple pull up warnings from its terrain awareness warning system (Taws) before touching down far beyond the threshold of the 3,474-foot runway with 1,437 feet of pavement remaining, according to the U.K.’s Air Accidents Investigation Branch (AAIB) preliminary report, published on August 6.

The accident destroyed the Saudi Arabian-registered jet (HZ-IBN), inbound from Milan, Italy, and claimed the lives of all four people on board—the 57-year-old 11,000-hour pilot and three passengers, which included members of Osama Bin Laden’s extended family. The weather was good VFR, with visibility better than six miles, light wind and no low clouds.

Toward the end of a visual approach, the Phenom overtook a microlight and climbed slightly to pass ahead of and above the smaller aircraft. As this climb began, at approximately 1,000 feet above aerodrome level (aal), the Taws issued a descend resolution advisory (RA).

The Tcas RA changed to maintain vertical speed and then adjust vertical speed, but the AAIB suggests these instructions might have been to resolve a second conflict with another aircraft above the Phenom, to the east of the field. Following this climb, the Phenom then descended at up to 3,000 fpm toward the threshold of Runway 25. The Tcas announced clear of conflict when the jet was 1.1 nm from the runway threshold, at 1,200 ft aal and flying at 146 knots with the landing gear down and flaps 3 selected. Between 1,200 and 500 ft aal the rate of descent averaged approximately 3,000 fpm, and six Taws pull up warnings were triggered on final by a 2.500-fpm descent rate at 500 feet agl.

The aircraft operator estimated that the landing weight was 14,378 pounds/6,522 kg. Embracer told the AAIB that at this weight the target threshold speed would have been 108 knots—42 knots less than the 150 KIAS the aircraft was doing when it crossed the threshold of Runway 25 at 50 feet.

Fire marks show that the jet touched down 2,329 feet past the threshold with 1,437 feet of pavement remaining, and the FDR revealed that the touchdown groundspeed was 135 knots (134 KIAS). Embracer told the AAIB the Phenom would have required 2,021 feet to come to a halt from this speed, noting that its calculation was based on a maximum-performance landing as demonstrated by test pilots during certification trials.

The aircraft overran the paved runway surface, 10 feet left of centerline, before striking a three-foot-high berm and briefly becoming airborne again. It then collided with several cars parked at an adjacent business. The wings detached and the aircraft exploded.

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**2016 OLYMPICS SET TO BE LOST OPPORTUNITY FOR BUSINESS AVIATION**

The Olympic Games in Rio de Janeiro are shaping up to be another missed opportunity for business aviation, according to ABAG, the Brazilian general aviation industry group. ABAG chairman Eduardo Marson Ferreira recently warned that Brazil’s authorities appear set to impose operational restrictions that will severely constrain the use of business aircraft.

ABAG director general Ricardo Nogueira said the Olympic Games (Aug. 5-21, 2016) look to be at least as much of a disappointment for the business aviation community as last year’s World Cup soccer championship. “Years ago, when I was in the air force managing air traffic, there was a controllers’ slowdown, a protest about safety, and I said, ‘You’ve achieved safety. There’s nothing that makes air traffic safer than keeping all the airplanes on the ground,’” he said. “For the World Cup there was maximization of safety, achieved by minimizing general aviation.”

“It will be worse in August next year,” he predicted, before divulging that at a recent meeting with Brazil’s SAC (Civil Aviation Secretariat) he was shown plans for airspace control for the Olympics, to which he responded, “You’re taking Rio off the map!” For general aviation, he noted, the authorities are “minimizing the risk to zero, by not having any aircraft flying.”
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More than ATC at stake in FAA reauthorization

by Kerry Lynch

As Congress prepares to begin debate in earnest about a comprehensive FAA reauthorization bill this month, attention has centered on the controversial proposal to create a new organization to replace ATC. In previous attempts, the bill is expected to cover myriad other issues, many of which have long been sought by the business and general aviation community.

The House Transportation & Infrastructure (T&I) Committee in July gave a sneak peak at what some of those issues might entail, releasing an outline of more than two dozen concerns the committee hopes to address in the bill.

“Too be called the Aviation Innovation, Reform and Reauthorization Act (AIRRA),” the bill is based on safety and efficiency; improved reliability for passengers; innovation; and U.S. competitiveness, the committee said. The bill, the committee promises, “will help modernize the antiquated U.S. ATC system, improve aviation equipment and aircraft certification, improve service for consumers, strengthen the FAA’s critical safety and regulation missions, provide for airport infrastructure across the country and enhance the safe integration of unmanned aircraft systems.”

**Certification Efforts**

Two of the primary goals of the committee’s bill are to streamline the certification process and improve aviation safety. Simplifying the certification process has been one of the industry’s top issues, with General Aviation Manufacturers Association (GAMA) president and CEO Pete Bunce testifying on several occasions before various congressional committees on the need for change.

“If we can make certification simpler for companies, we can reduce costs,” he told AIN recently, adding that to spur more interest in the market “we have got to reduce costs.” Not only does it generate more interest in the industry, it strengthens the industry, he said. This is especially true for start-up companies that are not in the FAA’s pocket to fund costly projects and might struggle with an unpredictable certification process.

The industry’s message has gotten notice. One of the first T&I Committee hearings was on the cumbersome certification process and the inconsistent approach to regulation. During a speech before the Aero Club of Washington in early June, T&I Committee chairman Bill Shuster discussed only two aspects of the bill: ATC reform and certification reform, underscoring their importance to the chairman and the committee.

“The current FAA bureaucracy undergirds our global competitiveness and puts American jobs in jeopardy. This aviation bill will enhance American companies’ abilities to compete and get their products to market faster,” Shuster said. “Cutting the red tape in this process, and other reforms we will provide for the agency, will greatly benefit our system and our economy.”

Shuster emphasized that the bill would streamline certification processes while maintaining strong safety oversight. While the committee outline doesn’t provide many details, it does discuss greater use of delegation authority, one of the key requests of industry. It also specifies improved FAA inspector and engineering training and development.

The bill will attempt to foster better agency collaboration with industry and labor stakeholders and more transparency and accountability for both the FAA and industry, the outline adds.

The bill would call for certification performance metrics and goals to measure progress in improvements and include mechanisms to tackle delays in foreign validation of U.S. products. It will also call on the FAA to promote U.S. aerospace standards internationally. Regulatory consistency further will be addressed in the bill, the outline stated, but again it does not point to specifics.

The bill will have a measure or measures designed to improve general aviation safety through streamlined approval for equipment installation on small aircraft. The Aircraft Owners and Pilots Association has been pushing for a cheaper, quicker process to bring new safety equipment to older aircraft. Separately, the bill will include measures to promote testing and deployment of new safety technologies.

Another safety measure will direct the FAA to develop a plan to address cyber-security vulnerabilities. The FAA came under criticism earlier this year from the Government Accountability Office, which reported that “significant security control weaknesses” identified within the FAA’s hardware, software and communications equipment threaten its mission of safety and efficiently managing the airspace system.

Unmanned aircraft systems (UAS) will receive attention in the reauthorization bill. Measures will be included to encourage wider use of UAS test ranges, to streamline approvals for commercial use of small UAS and to call for a study of privacy implications. Another measure will encourage development of sense-and-avoid technology.

**Industry Wish List**

A number of other measures are anticipated, or at least are on the industry wish list, but not included in the outline. The outline does not specifically address third-class medical or other Pilot’s Bill of Rights 2 pilot protections. FAA Administrator Michael Huerta indicated at EAA AirVenture that Congress might need to play a role to help move the third-class medical exemption.

Another measure on industry wish lists is help with ensuring that management fees are not treated as commercial services subject to the airline ticket tax. Industry groups have been awaiting IRS guidance on this issue, but agency turnover and the approaching sunset of the current Administration appear to be slowing the IRS effort, even if it is on the priority list. Industry groups are now turning to FAA reauthorization legislation to resolve the issue.

FAA funding levels also play a key role in FAA reauthorization. The outline does not specify long-term plans for funding, except that airport levels would remain unchanged. But with the promise of a new ATC organization, it is unclear how much of the FAA’s operations account would be eliminated, as well as its facilities and equipment funding. It is also unclear whether aviation taxes would remain the same or change in light of the potential of new user fees.

The T&I Committee is expected to debate the bill this month. The Senate has not discussed measures in its own bill or whether it will simply take up the House bill. But with controversial issues such as the independent ATC organization, consensus on the bill will likely be elusive.
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Challenger tire failures spur questions about safety

by Kerry Lynch

Reports of more than a couple of dozen failures of a certain Goodyear tire used on older Bombardier Challengers are spurring operators to question a potential safety issue with it. Leading the charge is Nick Popovich, president of aircraft repossession specialist Sage-Popovich.

The issue surfaced when a tire failed on Popovich's own 1983 Bombardier Challenger 601, N600NP on March 1 this year at Marco Island, Fla. The aircraft was damaged when it ran off the runway into sand and the nose landing gear collapsed. Popovich said video footage of the accident depicts the number-one tire failing on touchdown. After the accident, Popovich's flight department investigated its training, crews, continuing education program, aircraft and maintenance history and standards. “Nothing suggested a failure on our end,” he told the FAA.

When he later received a replacement aircraft, Popovich noticed a log entry related to a failure of the same tire part number. He also heard anecdotes of other failures and started to wonder if this was a common occurrence. He began surveying other operators about their experiences. Reports of 27 similar incidents flowed in from operators involving Goodyear tire Part Number 256K43-3 on the Challenger 600/601 series, he said. Popovich asked the FAA to look into the matter.

The FAA has been telling Popovich that the in-service tire events are being investigated by FAA Aircraft Certification Offices, the Small Airplane Director and Transport Airplane Directorate Safety Management Branch. The agency cautioned, however, that “tire failures on turbine-powered aircraft are quite common” and that it needs more data to determine whether there is a safety problem. The agency told Popovich that the information it has to date is “insufficient to determine root cause, or the actual consequences of the failures.”

When asked about the issue, Bombardier told AIN it is aware of Popovich’s concerns, but noted that the FAA has not found a safety issue. The company also noted that blown tires are often discarded, making it difficult to track a trend. But it pointed out, too, that the Challenger meets airworthiness requirements.

Goodyear told AIN it analyzed the tire on Popovich’s airplane at the time of the incident “and determined that its disablement occurred as a result of a common brake-related skid through, and was not due to any tread separation or manufacturing issue.” As for other reports, the company added it “responds to customer claims or complaints as we are notified.”

In correspondence with operators, a Goodyear representative mentioned possible reasons for issues, including tire pressurization and foreign object damage. One of the letters suggested that if the problem were systemic, the company likely would have received an inquiry from Bombardier. The Goodyear representative, however, did mention the potential for a manufacturing issue if all the incidents involve the same tire size/part number. In that case, he said, “we might consider this a possibility.”

While Popovich agrees that it is not unusual for tires to blow, the nature of the failure concerns him. In each of the incidents the tires failed in a similar manner, he asserts, with the tire separating from the core, which Popovich said might raise questions of bonding issues.

The National Transportation Safety Board is still investigating the accident involving Popovich’s aircraft, but the preliminary report notes that after touchdown, the pilot was unable to extend the ground spoilers and felt no deceleration when he applied moderate brakes and held the control yoke forward. He was also unable to deploy the thrust reversers. “The PIC informed the copilot there was no braking energy.”

The FAA had cautioned that there is still no final determination in that accident. But Popovich has his own theory: “Thinking through the logic of aircraft systems leads one to wonder [on the wheels] system failure, i.e., the aircraft clearly thought it was in the air and therefore overrode the manual inputs of the crew for brakes, ground spoilers and reversers,” he told the FAA.

Such a theory is not without precedent. The NTSB described a wow failure in its report of the 2008 crash of a Learjet 60 that killed a well-known Los Angeles DJ. The tires in that case were underinflated and failed.

Blown Tires Relatively Common

One operator in correspondence with Popovich reported having “a tire throw a big piece of tread. Can’t see where it was cut.” Others reported not only having a tread separation but also experiencing a wow fault. Another stated his aircraft had just incurred its third Goodyear tread separation and said he had met with another operator that had had either four or five similar incidents. Charter and management firm Solaris confirmed to AIN that it experienced two incidents this summer.

These issues involved tires that had logged between 29 and 141 landings. According to Popovich, the tires appeared to have had significant tread life remaining and no signs of misuse. Popovich theorizes that the failures stem from a lack of adhesion between tread rubber and nylon breaker ply and/or cords. This causes the outer ribs to separate from the tire and led to damaged airframes, he asserted.

According to Popovich, it appears that the tires involved were manufactured in Brazil between 2004 and last year. Popovich worries that more incidents are occurring, but that because tire failures are not especially uncommon the incidents are not getting reported. He is convinced something must be done before someone gets hurt in an accident. Popovich was injured in his own accident and the aircraft was substantially damaged. “The situation is a danger, and this is the only tire approved for the aircraft,” he told the FAA in an email. In the meantime, he said he’s working to obtain approval to use different tires.

Drone sightings

Continued from page 1

National Multi-Agency Coordinating Group at the National Interagency Fire Center in Boise, Idaho.

As attention was drawn to these cases, the FAA released a statement saying it “wants to send out a clear message that operating drones around airplanes and helicopters is dangerous and illegal. Unauthorized operators may be subject to stiff fines and criminal charges, including possible jail time.”

The statement marked a shift for the agency, which had hoped to foster safe use through awareness campaigns and educational efforts rather than enforcement actions. While those efforts (including the “Know Before You Fly” campaign) will continue, the agency also is working closely with local law enforcement to curb the growing trends. While the FAA has limited authority over recreational UAS, it does have authority over airspace safety. The agency notes it has levied civil penalties and has “dozens” of open enforcement cases. It also made an appeal to the public to report unauthorized drone activity to local law enforcement.

In the meantime, Congress, which has focused on facilitating the accommodation of authorized commercial UAS, has begun to discuss measures to help rein in these incidents. “The new data released by the FAA should sound the alarm,” said Sen. Dianne Feinstein (D-Calif.). “During a serious wildfire in California last month, a drone delayed aerial firefighting operations by 20 minutes. The fire then quickly grew and torched several cars when it leapt a highway. Just yesterday in Fresno, a medical helicopter carrying a patient from the hospital missed colliding with a drone by just 20 feet.”

Feinstein pointed to projections that more than one million recreational drones will be flying by year-end. “The FAA has virtually no authority to regulate consumer drones and the effects are clear,” she said. Feinstein and Charles Schumer (D-N.Y.) had introduced legislation in June that would fortify the FAA’s authority over recreational UAS and mandate requirements for new safety features such as collision avoidance software and improved tracking mechanisms.

“We support the FAA’s taking a more aggressive approach to assessing civil penalties against operators violating those rules,” said Dave Mathewson, executive director of the Academy of Model Aeronautics (AMA). The growth of sightings highlights not only the need for stricter enforcement, but also the urgency for the FAA to finalize its small-UAS rules, Mathewson added. “Whether flying a commercial UAS or a model aircraft, there are rules that prohibit careless and reckless operations,” he said. AMA members have safely operated model aircraft for nearly 80 years, he maintained, but added, “Unfortunately, the same is not always true for the legions of new ‘drone’ fliers taking to the skies.”

The Association for Unmanned Vehicle Systems International (AUVSI) echoed those sentiments. “The proliferation of irresponsible UAS flights underscores the need for the FAA to finalize its small-UAS rules and more aggressively enforce existing regulations,” said AUVSI president and CEO Brian Wynne. “Stricter enforcement will not only punish irresponsible operators, but it will also serve as a deterrent to others who might misuse the technology.”

One Challenger 601 owner had a tire failure on landing that Goodyear attributes to braking-related skid through. He disagrees with that verdict and decided to investigate whether such failures are common. Photo shows failure of the same series tire on another Challenger.

One Challenger 601 owner had a tire failure on landing that Goodyear attributes to braking-related skid through. He disagrees with that verdict and decided to investigate whether such failures are common. Photo shows failure of the same series tire on another Challenger.

One Challenger 601 owner had a tire failure on landing that Goodyear attributes to braking-related skid through. He disagrees with that verdict and decided to investigate whether such failures are common. Photo shows failure of the same series tire on another Challenger.
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Flexjet accelerating delivery dates of G450s

by Matt Thurber

Under an accelerated delivery plan in response to “heavy market demand,” fractional-share operator Flexjet will place six G450s into service by year-end. Flexjet placed an order for up to 50 Gulfstreams in October last year, including the G450, G650 and the new G500, for which Flexjet “will be the North American launch customer and exclusive fractional provider,” according to the company.

“Since we took delivery of our first G450 in June, the response to these new long-range aircraft has been so robust that we have asked Gulfstream to move up delivery of our next two G450s to this fall, rather than mid-2016, as previously agreed to,” said Flexjet CEO Michael Silvestro. “Our [year-over-year fractional share] sales for the year are up 20 percent and the marketplace clearly is hungry for extended-range products from Gulfstream.”

Flexjet’s first G650 is slated for delivery early next year, and the first G500 is expected in 2018. The Gulfstream order originally was for 22 firm (10 G450s, six G650s and six G500s) and 28 options. Two of the options were moved up to accelerate the G450 deliveries, so the order now stands at 24 firm and 26 options, according to Silvestro. “We still have flexibility in options across those three fleet types. Gulfstream was accommodating in the types we felt were most desirable.”

Return to Growth

“In the fractional jet industry, you hear a lot about orders for new airplanes being delayed or cancelled, not accelerated,” said Flexjet chairman Kenn Ricci. “Not only have we had strong demand for the G450, but we also are seeing tremendous enthusiasm for the G650.”

The company’s Gulfstreams, Learjet 75s, Challenger 350s, Global Expresses and Legacy 450s and 500s are or will be equipped with Flexjet’s customized LXI Cabin Collection configuration.

The first Embraer Legacy 500 delivery is scheduled for this month, and Flexjet will take five this year. Legacy 450 deliveries begin in June next year. “We’re excited about [the Legacy 500],” he said. “It really rounds out our fleet, and I can’t wait to get it in the program.” The new aircraft are expected to expand the Flexjet fleet by at least 50 percent, if not more, from about 85 earlier this year “to the low to mid 100s,” according to Silvestro.

Recently Flexjet reregistered some Phenom 300s operated by sister fractional-share provider Flight Options with Flexjet N numbers. Silvestro explained that the two fractional’s fleets aren’t being merged but that Flexjet was selected as the brand for new deliveries. “That’s the theme of Flexjet,” he explained. “As we thought about the fleet, the Phenom became the product that would be more aligned with the Flexjet brand, and that’s why new deliveries of Phenoms are coming on as the Flexjet brand, and we did start converting some Phenoms to Flexjet.”

Silvestro sees Flexjet as having returned to growth mode. “I’ve been in this sort of strategic planning mode for the better part of a year and a half, and we started to execute in 2015; 2014 was more of a transition. I’m excited that the marketplace has responded. The third and fourth quarter are [typically] the most robust, and we’re headed into the busiest part of the year with great momentum.”
NTSB points to carburetor in Ford crash

by Kerry Lynch

The National Transportation Safety Board cites the unseating of the carburetor metering jet and a lack of adequate carburetor maintenance instructions in the March 5 crash of a Ryan ST3KR (PT-22) piloted by actor Harrison Ford. A strong advocate for the general aviation industry, Ford was seriously injured when his aircraft, N3178, crashed shortly after takeoff from Santa Monica, Calif. In the recently released probable cause, the NTSB said an improperly installed shoulder harness contributed to the severity of Ford’s injuries.

The Board cited as the probable cause of the accident: “A total loss of engine power during initial climb when the carburetor main metering jet became unseated, which led to an extremely rich fuel-to-air ratio.” The lack of adequate carburetor maintenance instructions contributed to the accident.

Shortly after taking off, Ford alerted ATC that he had lost engine power. He made a left turn toward the airport, but soon realized he would not be able to reach it, the NTSB said. His aircraft struck a treetop and crashed onto a nearby golf course. The investigation found the carburetor’s main metering jet was unscrewed from its seat and rotated 90 degrees. This would have increased fuel flow through the main metering orifice, producing an extremely rich fuel-to-air ratio and causing loss of power, the NTSB said. The Safety Board believes the jet gradually loosened from its seat over time, eventually allowing it to rotate 90 degrees. The NTSB did not find any other mechanical issues that would have prevented normal operation.

The carburetor had been rebuilt about 17 years before the accident, but there were no pertinent instructions for the installation of the jet assemblies in the maintenance manual. No logbook entries were found regarding carburetor maintenance.

Further, the NTSB noted that the shoulder harnesses in the front and rear seats were not factory installed. They did not have reinforcement material or doublers around the attachment in the seatback. “The lack of reinforcement allowed the attachment bolt, washers and stop nut to be pulled upward and through the seatback structure during the impact sequence, which resulted in the pilot’s loss of shoulder-harness restraint.”

SALES FACILITIES MERGE IN S. AFRICA

Textron Aviation melded the Beech and Cessna brands in January last year, and now that enmeshing is under way at its sales and support providers in South Africa. Last month Johannesburg-based Absolute Aviation Group acquired Comair Sales, Services and Spares (CSS), based at Lanseria International Airport.

Absolute has long served as the Beechcraft distributor in 50 countries across Africa. CSS has served from the outset as the authorized distributor for Cessna in South Africa. It handles sales, maintenance and spares support for all Cessna’s piston aircraft, as well as for the Caravans and Citations, holding authorized service center status on a number of models.

Neil Howard, Absolute Aviation Group CEO, said, “[This] acquisition ensures that we are well positioned to continue to differentiate ourselves from our competitors into the future.” –M.P.
Companies outline recent customer service initiatives

Although avionics and cabin electronics have grown more reliable with advances in technology, there is no substitute for after-sale support when a piece of equipment fails. To learn more about this important facet of their business, we asked companies that make avionics and cabin electronics equipment to summarize improvements in their product support activities during the past year. Not all manufacturers responded.

Avidyne

Avidyne says it has ramped up its technical support staff to handle a growing base of customers, now that the new IFD540 and IFD440 touchscreen navigators are certified and in service. In addition to expanding the support staff, Avidyne has consolidated support personnel at its Melbourne, Fla. repair station to improve tracking of repairs and to speed resolution of customer issues. The MyAvidyne.com website has been upgraded, and Avidyne techs can more efficiently analyze flight display logs using improved automated diagnostic tools.

Century Flight Systems

There are more than 1,600 STCs for installation of Century autopilots and many thousands of systems still flying and in need of support. “We pride ourselves on still supporting many systems that are 30 to 40 years old,” said business development manager Alan Flewitt. “Not many manufacturers, with all honesty, can promise that level of product support.” The company’s current product line includes the C1, C41, C2000, Triden and C4000 autopilots.

Esterline CMC

Esterline CMC has consolidated its Canadian MRO capabilities into a single facility, the company notes, “to provide a more structured and focused service for its customers.” Earlier this year, Esterline CMC acquired Barco’s avionics display line and it is completing the integration of those products. Esterline CMC is also expanding its MRO and distribution capabilities in Europe, centered at facilities located in Belgium. Also under way is “implementation of lean transformation projects and process flow optimization.”

FreeFlight Systems

To keep up with the influx of ADS-B equipment installations, for which FreeFlight Systems offers solutions from light aircraft to the largest airliners, FreeFlight says it is adding manpower to continue improving customer support capabilities. New hires include Dave Graham, the NextGen customer support manager, and Brad Brunson, technical services manager, who is responsible for dealer and installer training and support. Earlier this year FreeFlight launched the Blue Care extended warranty and enhanced product support program. Included in Blue Care are exchange options and quick turnaround services to help keep customers’ aircraft in the air.

Garmin

A result of multiple “customer-focused events” during the past year has been Garmin’s opening of a spares facility in Hong Kong. Another such facility is planned in Europe to augment the existing spares pool in the UK. Garmin has also simplified support processes, and customers around the world can tap its 24/7 AOG support hotline.

The avionics manufacturer says it “is dedicated to continuous improvement of customer service initiatives, and has made investments in training and support staff to help keep customers’ aircraft in the air.”
improvement of our products and support services.”

**Gogo Business Aviation**

Now fully rebranded as Gogo Business Aviation, the manufacturer of the only air-to-ground telecom system currently available says it has made a number of improvements during the past year. Gogo moved into a new building equipped with a technical support lab that can test and simulate real-world aircraft environments to help support personnel troubleshoot problems more quickly. Gogo’s enhanced real-time monitoring also facilitates the company’s “ability to deeply dive into customer issues.”

Among the improvements to the support process are more efficient and intuitive phone routing; enhanced trouble-ticketing system integrated with a new customer relationship management program; more service and support personal, including the addition of staff in the UK; and a one-stop shop on the Gogo customer portal for access to technical documents, service information letters, notices of changes, order tracking and usage monitoring.

**Honeywell**

Honeywell says customer feedback has driven improved access to information on its MyAeroSpace.com customer portal. The terms of the Honeywell Avionics Protection Plan (Happ) and Mechanical Protection Plan (MPP) have been lengthened to three years with a fixed 3-per-cent escalation rate. For additional coverage, operators can add Happ Gold to existing Happ agreements for $30 per flight hour. Services provided with Gold include 24/7 worldwide AOG road-crew support; counter-to-counter, first-morning and Saturday delivery; coverage of additional fees for no-fault-found or rectification of components; and access to technical documents, pilot guides, system descriptions and operation manuals.

Honeywell has also deployed a mobile app, MyMainainter, which allows technicians to access data stored in the onboard Data LAN Management Unit Wireless (DLMU-w) system. For security, only approved and certified devices can access the DLMU-w using the app. “It will also log fault history,” according to Honeywell, “and allow users to compare similar faults for ease of troubleshooting.”

**International Communications Group (ICG)**

ICG began scheduling classroom training for customers and dealers on its new eRouter products last month. The product support team provides face-to-face instruction on how to make the most efficient use of the eRouter, which provides scalable voice and data routing services designed for aircraft applications, according to ICG.

The company also tailors its Operator & Flight Line Maintenance Training course for the NxtLink ICS-120A and ICS-220A Iridium satellite systems to help answer any requirements and concerns of avionics engineers and technicians designing and installing data-link and flight-deck communications systems. The course was FAA approved for Inspection Authorization renewal training. ICG offers on-site training to help customers with their specific aircraft installation.

**Innovative Solutions and Support (IS&S)**

IS&S has added field engineering representatives at high-volume airports for quick dispatch to customer locations, to expand customer service and support activities, especially for installation issues before, during and after modifications.

For swifter problem solving, IS&S has developed software tools, including its “interface, identify and troubleshoot aircraft installation and operational issues.”

“The end result allows faster diagnosis and correction of issues affecting the aircraft, which shortens maintenance downtime and maintains high dispatch reliability and/or operational readiness,” according to IS&S.

**Mid-Continent Instruments and Avionics**

In business for 50 years, Mid-Continent Instruments and Avionics, through its True Blue Power subsidiary, has become a supplier of lithium-ion main-ship batteries for aircraft, as well as for experimental amateur-built aircraft. To help educate the industry about the new batteries, Mid-Continent offers training at trade shows and events and its Lithium Batteries 101 series. According to the company, the course “outlines proper maintenance, handling, storing, shipping and safety regarding the technology—not just True Blue Power products.”

The company has added expanded ELT services as well as authorization of its Van Nuys, Calif. facility as a repair center for Trig Avionics (the Wichita headquarters holds the same authorization). Mid-Continent continues to add to its overhaul/exchange pool so it can offer same-day shipping without expedited service fees. Mid-Continent authorized warranty centers have been added in Germany and Australia.

**Rockwell Collins**

Rockwell Collins solicits customer feedback through surveys, advisory boards and day-to-day interactions to identify “ways to retain and improve high customer satisfaction and reduce unnecessary callbacks,” the company said. Some of the improvements in the customer support effort are attributable to...
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The TY92 high-power and compact VHF radio by Trig Avionics

As with AIN Publications’ previous annual Product Support Surveys, the objective this year was to obtain from the users of business jets, turboprop airplanes and turbine-powered helicopters statistically valid information about the product support provided by business aircraft manufacturers over the last year and to report this information to our readers.

The ultimate goal of the survey is to encourage continuous improvement in aircraft product support throughout the industry. This survey was conducted via a dedicated website, created by AIN from the ground up to provide improved ease of use and to encourage greater reader participation. AIN emailed qualified readers a link to the survey website and questionnaire. In total, 16,338 readers were invited to participate in the survey.

The survey website was open from May 4 to June 12. Respondents were asked to rate individual aircraft and provide the tail number, age (less than 10 years old or more than 10), primary region of service and whether they used factory-owned or authorized service centers, or both. Respondents were also asked to rate, on a scale from 1 to 10, the quality of service they received during the previous 12 months in the following categories:

- Parts Availability—in stock versus back order, shipping time.
- Cost of Parts—value for price paid.
- AOG Response—speed, accuracy, cost.
- Warranty Fulfillment—ease of paperwork, extent of coverage.
- Technical Manuals—ease of use, formats available, timeliness of updating.
- Technical Reps—response time, knowledge, effectiveness.
- Overall Product Reliability—how the product’s reliability and quality stack up against the competition.

Respondents were also asked to recognize individuals who have provided them with exceptional product support and service. The list of these people is available online at www.simonline.com/above-beyond-2015.

The 2015 AIN Product Support Survey results for aircraft were published in the August issue; engines will follow next month.
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The brave new world might someday move pilots out of the cockpit

Technology is marching ever onward, and it sometimes seems as though we are intent on eliminating all human involvement in complex operations—including flying airplanes. Who among us has not wondered, after some accidents that have happened, whether a properly programmed computer might have done a better job of flying the airplane? The downward trend in the number of pilots in cockpits over the past decades seems to support that conclusion, too. Better technology directly eliminated the flight engineer position, and the two-pilot cockpit is completely normal now for the largest airplanes. Even one-pilot cockpits are ordinary, both in simple aircraft and in business jets that are fairly complex, from the lightest of Part 23 jets such as the Eclipse 500/550 to the Part 25-certified Citation 500/560 operating under Part 25 certification. Some pilots have characterized the two-pilot cockpit as though we are intent on eliminating all human involvement in existing aircraft and facilitate reduced need for onboard crew.”

Phase 1 of Alias involves developing “minimally invasive interfaces” between today’s aircraft and automation systems that would be in the form of a “drop-in, removable kit.” This does not envision a beeping, blorp Star Wars R2D2 strapped into the right seat. The drop-in kit would be able to work in a variety of aircraft and relieve the pilot of having to provide “constant vigilance over lower-level flight maintenance tasks.” According to Darpa, “The program intends to leverage the considerable advances that have been made in aircraft automation systems over the past 50 years, as well as the advances that have been made in remotely piloted aircraft technologies, to help shift and refocus pilot workloads, augment mission performance and improve aircraft safety.” The three companies working on Alias are Aurora Flight Sciences, Lockheed Martin and Sikorsky.

The primary arbiters of the interface between pilots and aircraft remain avionics manufacturers, although airframe manufacturers influence these design decisions, too, because it is their money that pays for the avionics. To find out where avionics design is headed in view of these trends, AIN interviewed four manufacturers of today’s highly integrated avionics to find out whether they are working on technology that would reduce or eliminate pilot positions and what it would take to achieve that goal. Rest assured, however. Pilots are not going to lose their jobs in the near- and medium-term future. This is not just because the technology isn’t quite there yet but also because passengers still want someone up front in the airplane who has a stake in the outcome, and not a remote operator guiding their fate from an office building.

There is no question that a convergence of technological capability is taking place. Unmanned aircraft of all types are growing in proficiency, in exponential leaps and bounds. And there is a tangible problem in developing enough pilots to fill the needs of unmanned aircraft systems (UAS) operators all over the world. Perhaps someday this will result in large no-pilot aircraft, maybe starting with cargo carriers. In an age when self-driving cars are already plying public roads and when in our lifetimes we may relinquish ordinary driving duties, this may not necessarily come as too much of a surprise.

Rockwell Collins Studies Feasibility

Last year NASA’s Ames Research Center signed a four-year contract with Rockwell Collins to study single-pilot operations (SPO). This is not a new concept; NASA’s Flight Deck Display Research Lab held a meeting in 2012 to discuss SPO, and it was attended by aircraft manufacturers (Boeing, Cessna, Eclipse), avionics manufacturers (GE, Honeywell, Rockwell Collins, Collins Aerospace), others — including FAA. AIA, NASA, DARPA, etc. The outcome, and not a remote pilot, has not been shared with the public.

The Defense Advanced Research Projects Agency (Darpa) has signed contracts with three companies for research into an Aircrew Labor In-Cockpit Automation System (Alias). Some writers have characterized Alias as a flying robot co-pilot that gets plopped into one of the cockpit seats, that isn’t exactly accurate. Alias, according to Darpa, is “a tailorable, drop-in, removable kit that would enable high levels of automation in existing aircraft.”

Special Feature: THE NO-PILOT COCKPIT?

by Matt Thurber

Rockwell Collins is working with NASA on a single-pilot operations concept, which includes a supplemental “super dispatcher” on the ground to assist the sole pilot.
The goal of the Rockwell Collins SPO contract, still in its first year, according to Mike Matessa, senior systems engineer at the Rockwell Collins Advanced Technology Center, “is to explore the feasibility of single-pilot and reduced-crew operations. We’re looking at concepts and technologies that would enable [this], and any gotchas.”

One technology that has an big influence on these kinds of decisions is airborne connectivity, according to Geoffrey Shapiro, also a senior systems engineer working with Matessa at the Advanced Technology Center. “A cornerstone of making this work is a robust ground network to help pilots in the air,” he explained. “We’ve had the capability of autoland for a while. We’re taking that a few steps further.”

However, he added, the system wouldn’t depend on even a low-bandwidth connection, although broadband connectivity would be optimal. “We know that connectivity will fail; that is inevitable. But there are safeguards in place to make sure that it is safer than current operations.”

The initial concept that Matessa and Shapiro are evaluating includes a sole pilot in the cockpit supplemented by a “super dispatcher” on the ground. This dispatcher would monitor multiple aircraft, but if a pilot needed piloting assistance, the dispatcher could call in a remote second pilot to help out.

One requirement to make this concept work would be physiological monitoring of the pilot in the air. This would make sense in a setup where only two pilots are flying, say, a long-distance trip, and SPO is used while one pilot rests. “If the pilot has a heart attack, we need to know that,” Shapiro said. “Do we need to bring the other crew up there?”

This isn’t just about monitoring pilots to make sure they are alive and healthy. “Automation monitoring requires that pilots engage with the system,” he added. “If they say, ‘I’m done with this mission,’ the pilot is engaged with the automation and has proper situational awareness. This is critical technology that has to be mastered.”

For example, what technology would facilitate communication between a remote super dispatcher or ground-based pilot? After all, Matessa pointed out, professional pilots still have problems communicating with the pilot a few feet away. “We’re starting to add enabling technology like video and shared documents and indicators of activity, and it’s definitely helping their ability to understand what the other person is doing. Even separated, they are able to complete tasks but give better ratings about how they feel they performed.”

The Rockwell Collins work involves simulation of SPO and examining various scenarios, such as figuring out how SPO can handle systems failures on the airplane, an airport closing because of weather, reroutes and so on. “It looks encouraging,” Shapiro said, “and is definitely worthy of continued study. We don’t see any showstoppers yet.”

Although this research isn’t focused on a no-pilot cockpit, it will have to consider incapacitation of the sole pilot. “The ability to do an automated landing at the nearest airport is an essential concept for safety, and it would feed into this,” Matessa said.

“The important element is to know what humans are good at and what automation is good at, and striking the right balance,” Shapiro said. “Humans are fantastic decision makers. You don’t want to turn this all over to automation. Humans are a great check against computers, to make sure they’re doing what they’re supposed to be doing. Computers are great monitors.”

“A hybrid approach takes advantage of what machines and humans are good at. Basic piloting skills are not going away. We’re not saying that folks [should not be] hand flying and are not required to have basic airmanship, no way. The pilot role may be changing a little bit, but it’s not changing as much as you would think.”

Honeywell Looks to Human-Machine Interface

“I’m not a big fan of the idea of non-piloted aircraft,” said Bob Witwer, Honeywell vice president of advanced technology. “I don’t know that there is such a thing or will be for a long time. Just like anything else that we do when we’re doing aerospace design, what are the mission needs? We really need to understand the mission.”

In Witwer’s opinion, the focus should be less on reducing pilots in a cockpit and more on human-machine collaboration.

Historically, he sees the drop from three to two pilots coinciding with onboard automated systems, then you have to deal with all the vulnerabilities of a system or from intentional attacks. “In a network, you have to deal with both nonmalicious problems,” Witwer added, “about going to full automation and getting humans out of the loop, making sure you have super-high levels of availability and integrity of all the systems, and that nobody can monkey around with them. If you rely on connectivity with onboard automated systems, then you have to deal with the question of malicious and nonmalicious problems.”

He cited as one example of an unforeseen malicious problem the fire that closed the Chicago en route control center in September last year, which caused huge delays. “Therein lies one of the big concerns,” Witwer added, “about going to full automation and getting humans out of the loop, making sure you have super-high levels of availability and integrity of all the systems, and nobody can monkey around with them. If you rely on connectivity with onboard automated systems, then you have to deal with the question of malicious and nonmalicious problems.”

Continues on next page
problems managing the center’s airspace. “I bet a lot of people were happy those airplanes had pilots flying them,” he said.

For pilots who are flying now, there has been a subtle transition that is helping them do their jobs with greater safety and efficiency. Traditionally, pilots had one display for tactical information (heading, airspeed, attitude, autopilot modes and so on) and another for strategic information (nav displays, 2-D moving maps).

“There was a hard line between tactical and strategic,” he noted. Now many pilots are flying with synthetic vision systems (SVS), which present an animated 3-D view of the outside world.

“I would offer that we’ve made it much more natural to fly the airplane,” he said. “We migrated from mechanical instruments to a similar presentation that happened to be electronic. Now we allow the pilot to think mission-wise. That’s the biggest advantage of the SVS view; it’s more like what the pilot would want to think about to manage his mission. Mission-wise, there is no hard line between right now and five to 10 minutes from now.”

This fits in with what Witwer and his team focus on when designing complex systems. “Always give the pilot what he needs, only what he needs [if it is superfluous] it can be confusing and misleading; only when he needs it [understand what the point of the mission is, and if it’s not germane, don’t give it]; give the pilot this information in a way that’s intuitive, unambiguous and easy to understand [there are times when touch can be a helpful modality, and times when voice can be helpful].

“I’m going to keep my team totally fixated on continuing to advance this whole notion of machine-human collaboration and [on] pilots understanding what the machine is doing. Where the pilot will sit is a decision that will [come] down to who cares.”

Universal Avionics Cites Cost, Safety

Universal Avionics CEO Paul DeHerrera sees two key drivers leading to development of technologies for single-pilot and autonomous (no-pilot on board) aircraft: cost of operation and safety concerns. “Before a complete changeover to autonomous operations, an increase in oversight will begin to gain traction in future cockpits,” he explained.

“This will include video presentation [single-pilot] flight path and flight condition monitoring for the various phases of flight. For instance, deviations exceeding some predetermined distance from the scheduled flight path could trigger an onboard system to take action, including ground-based alerts and in extreme cases the complete override of control.”

There are some technologies deployed that help facilitate single-pilot operation, he pointed out, such as autothrottling propellers and autopilot emergency descent and unusual attitude recovery modes. Further development is needed for avionics to make a decision, although some of these systems already do so.

“In addition,” he added, “this type of operation will require extremely reliable datalink at sufficient bandwidth to enable a reliable link to the ground for the transfer of instructions or emergency operation. Depending on the specific situation, the onboard computer might provide a warning before executing a specific task, but it will act more like a co-pilot [talking action] instead of just providing awareness and waiting for pilot action in the case of single-pilot operations, or in autonomous flight will execute automatically or as directed by ground control.”

While cost might dictate a move to single-pilot or autonomous flight in cargo aircraft first, a track record of safe operations there “would prove to the public that aircraft can be flown safely and, in many cases, just as safely as with two pilots or in autonomous flight without pilots.”

Before this can happen, however, some infrastructure would have to be deployed, including “strategically placed ground stations that could ‘accept’ an aircraft for autonomous control,” according to DeHerrera.

“The limits of line-of-sight for autonomous control of aircraft mean that the onboard FMS would need to be able to look at a database of autonomous ground stations. It would also need to evaluate the fuel on board [and] distance to station and fly the aircraft autonomously to a safe altitude, placing the aircraft in line of sight above the closest ground-based control station. This would enable the aircraft to be flown from a ground-based operation and land safely at a nearby airport,” he said.

Thales Taps Technology

The Thales design philosophy isn’t intended to eliminate pilots from cockpits. Of more importance is using technology to help pilots fly more efficiently and safely.

No matter how many pilots are on board, said Richard Perrot, avionics vice president of marketing, “The pilot] remains at the heart of the decision, and at the same time he is getting better information. We really want the pilot to be able to manage the flight. As we’re providing more accurate information in the cockpit, the work is much easier because the decisions will be much easier.”

There is ample evidence that sole pilots can handle complex aircraft, he added, mainly in the military. “We’re doing it in general aviation as well.” But airlines and larger business jets continue to require two pilots and even three for long-range trips.

“We’ve reached a level of complexity that is almost a maximum for the pilot,” he said. To fix this problem, Thales continues to refine its Avionics 2020 design philosophy. “Our philosophy is to simplify the man-machine interface and present information in the most clever way we can: the right information at the right time.”

The primary Avionics 2020 interface is a large touchscreen that covers the entire instrument panel. “Instead of asking the pilot to go to the system to search for information, [we] bring the information to the pilot. The pilot remains in the center of the loop, but all systems are reworked to bring him more value.”

This might lead to the need for fewer pilots, he said, “because the way to operate the avionics might be easier, with less workload.” This could make operations such as ferry flights safe when flown by one pilot. Or a long-range business jet trip could achieve an equivalent level of safety with two pilots instead of three.

The Avionics 2020 design is aided also by advances in airborne connectivity. “We’re able today to bring information on board for the pilot to manage his mission,” he said. “This was not possible in the past. Connectivity is really an enabler for this new era.”

Another area that is already showing connectivity benefits is the sharing of weather and sensor data from aircraft to aircraft. Large fleets of airliners are being equipped with systems that can send data to weather providers, which disseminate information based on that data to other customers and fellow fleet members. Aircraft today typically maintain trajectory information in the FMS, Perrot explained, while the best weather information is disseminated to dispatchers on the ground. By mixing on board the most current weather information with the trajectory, he said, “This gives us the most accurate prediction for the pilot, so it’s a real help. And if three hours ahead the pilot decides to modify his flight plan, he will be able to avoid weather or turbulence.”

Pilots have been testing Avionics 2020 concepts in simulators for a few years and so far, he said, “Surprisingly they have had good reactions. We thought they would be conservative, but it has been completely the opposite. They immediately thought that the organization of information is putting them at the heart of the cockpit. They were pleased to see that it reduced their workload without reducing important information.”

Thales has also been testing head-mounted displays with Avionics 2020. “This opens a huge landscape of applications for the pilot,” Perrot added. “We are sure it brings added value in the cockpit in some aircraft where you cannot install a head-up display. We’re pretty sure this kind of technology will be implemented in the commercial world before 2020.”

Whether all of the Thales Avionics 2020 research translates into widespread changes depends on the regulatory climate. “I don’t think regulations will be removed too fast,” he said, “and regulations can change only if we provide the same level of safety as we have today. “The only thing we can do is provide the most appropriate technology to support manufacturers with a new cockpit philosophy. Today we have made tremendous progress in terms of the man-machine interface and the information presented to pilots, and thanks to connectivity we can bring much more value in terms of mission management. It depends on the willingness of manufacturers to implement this technology.”
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Avionics industry posts sales gain in second quarter

Avionics sales for business and light aircraft climbed 3.1 percent during the second quarter this year over the first quarter, but fell year-over-year by 8.5 percent (first half of 2015 versus the same period in 2014), according to the Aircraft Electronics Association’s second-quarter 2015 Avionics Market Report. Forward-fit ($624 million) and retrofit avionics sales ($568 million) exceeded $1.192 billion in this year’s first half. In that period, 64.5 percent of sales were in the U.S. and Canada and 35.5 percent in the rest of the world.

“While there was a general improvement of 3.1 percent in the second quarter when compared with the first three months of the year, a decrease in year-over-year sales might indicate that the industry is facing some economic challenges,” said AEPA president Paula Derks. “The report also shows that a significant portion of the year-over-year decline in sales dollars is taking place in markets outside the U.S. and Canada, and perhaps the strength of the U.S. dollar is having an impact on sales in those regions.”

The avionics market report assumes net sales prices for cockpit and cabin hardware and software, portable units and noncertified aircraft electronics, as well as all other hardware, batteries and chargeable product upgrades. Not included are repairs, overhauls, extended warranties or subscription services. – M.T.

AVCON STCs LEARJET 60 AHRS UPGRADE

Butler National’s Avcon Industries subsidiary received STC approval to upgrade the attitude heading reference system (AHRS) in the Learjet 60 from the original Rockwell Collins AHC-65 to the Collins AHC-3000A. Bombardier Learjet partnered with Butler on the upgrade program, and operators can have the installation done through Butler National’s Butler Avionics subsidiary in New Century, Kan., which is a Rockwell Collins-authorized installation/repair facility.

The upgrade replaces the AHC-65 with the AHC-3000A computer and adds the ECU-3000 external compensation unit. There are two key benefits to the STC: one is the ability to replace one of the two AHC-65s at a time, which helps spread the cost, and much simpler cockpit-based setup and calibration of the ACH-3000A. The modification at Butler Avionics takes two to three days.

“The partnership with Learjet in facilitating the AHRS STC reinforces our commitment to the long-term support of Learjets,” said Butler National president and CEO Clark Stewart. – M.T.

HILIPARK NAMED DEALER FOR GARMIN IN BRAZIL

São Paulo-area heliport and maintenance center Helipark has signed a deal with Garmin International to purchase avionics directly from the factory, simplifying the process and saving cost for customers. Among many other products, Garmin supplied glass cockpits for helicopters, such as its G500H panel.

Helipark is an authorized service center for AgustaWestland, Bell Helicopter, Robinson Helicopters and Russian Helicopters, as well as for powerplant manufacturers Rolls-Royce and Turbomeca, with ANAC certification for maintenance on Airbus Helicopters. – I.S.

Flight-plan filing via SkyVector

Online flight-planning portal SkyVector launched FAA flight-plan-filing capability for all of its users in late July. “Our graphical weather products, FBO directory and worldwide charts have made us indispensable for pre-flight decision-making intelligence,” said SkyVector founder David Groves. “Filing was the obvious next step.”

Pilots can use SkyVector’s drag-and-drop route builder—driven by a new flight-planning engine—to generate accurate flight plans built on their aircraft performance profile and the winds aloft. The system will automatically compute any recently cleared or ATC preferred routes using the same aircraft and wind data, allowing the pilot to select the most efficient route for that day. Once the planning is done, briefing and filing are just a click away.

Through integration with Lockheed Martin Flight Service, all flight plans filed via SkyVector are instantly available to Lockheed Martin specialists. The integration with Lockheed Martin services brings advanced tools to pilots filing via SkyVector, including adverse conditions alerting service and surveillance-enhanced search-and-rescue. – C.T.

ASSOCIATED STCs

757 FANS

Associated Air Center has obtained an STC for installation of a Fans/CPDLC system on the Boeing 757-200. The future air navigation system (Fans) contains pilot data link communications (CPDLC) system includes an Iridium satcom and equipment supplied by Universal Avionics and Astro-Med.

While the company didn’t provide details of the specific type of equipment, Universal manufactures FMSs, data-link systems and flight data recorders used by many FBOs installers. Astro-Med makes data-acquisition systems.

The new equipment includes a new Acars, the satcom, a cockpit voice recorder and new VHF com, GPS and Iridium antennas.

Associated worked with sister company StandardAero and its Springfield, Ill., organization to certify the upgrade. Associated previously certified a Fans/CPDLC system in a Boeing 737-300, and both were done at the company’s Dallas Love Field repair station.

“This certification represents another significant industry accomplishment,” said Associated president James Coley. “Whenever an in-house team can develop an engineer data package to support the installation and integration of an FAA-certified CPDLC/Fans system for an out-of-production Boeing aircraft, it’s a serious technical achievement.” – M.T.

News note

Avionica’s new 4G cellular module helps speed delivery of flight safety data captured by Avionica quick access recorders (QARs). The new avCM is compatible with Avionica’s miniQAR Mk III and avDyn flight data analysis software, according to president and CEO Raul Segredo, and delivers data up to six times faster than the 3G module. The 4G module includes an integrated internal cellular antenna and Ethernet-type ground-support interface, all in a housing coated with a scratch-resistant black anodized surface. Avionica expects to receive FAA certification of the 4G avCM in the third quarter, and it will be installable under an approved model list STC for 250 aircraft types. – C.T.
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Embraer Delivers First Mexican Legacy 500

Embraer Executive Jets delivered the first Legacy 500 for a customer in Mexico. The midsize twinjet, which was awarded type certification from Mexico’s Civil Aviation Safety Authority in June, will be operated by Transpaís Aéreo, a subsidiary of Lomex Group’s aeronautics division. Embraer said the Legacy 500 is well suited for the Mexican market because of its runway performance and transcontinental range. With a range of 3,125 nm, the jet can fly nonstop from Toluca to Manaus, Brazil, or from Cancun to Vancouver, Canada. About 20 Legacy 500s are now in service since the first one was delivered late last year, an Embraer spokesman told AIN.

Brazil’s Avantto Partners with Acass on International Aircraft Sales

São Paulo-based business aircraft sales and acquisition, management and fractional firm Avantto has partnered with Acass to gain better access to the international market for aircraft sales, Avantto president Rogério Andrade told AIN at LABACE 2015. Besides having aircraft sales offices worldwide, Montreal-based Acass also offers crew support, aircraft management, ferry/delivery, interim lift, entry-into-service assistance and safety management system (SMS) compliance. "Having a company like Acass, which has representative offices in more than 50 countries and a broad distribution network, will help us to be more effective in providing service to our customers, since the market for buying and selling aircraft is not restricted to Brazil," Andrade said.

UAS Expands in Asia-Pacific, Targets Americas

UAS International Trip Support has forged three new partnerships in the Asia-Pacific region to strengthen its foothold in the region. T&T Aviation has been announced as UAS’s preferred commercial aviation partner in Vietnam. UAS has also entered into partnerships with IASS in Tokyo and Sari Biomantara on the island of Bali, Indonesia. Through the new agreements UAS offers priority parking, FBO access, tailored pricing and dedicated staff.

Waypoint Inks New Leasing Deal, Plans Regional Expansion

Helicopter finance company Waypoint Leasing has closed a second transaction with Brazilian rotorcraft operator Lider Taxi Aereo, which provides support for the offshore oil-and-gas industry. The deal covers the purchase and leaseback of a Sikorsky S-92. "This transaction strengthens our presence in a significant helicopter leasing market in Brazil and demonstrates our commitment to delivering operators tailored leasing that maximizes operational flexibility," said Waypoint CEO Ed Washecka. Lider is Brazil’s largest aviation service provider, offering maintenance, charter, aircraft management and ground handling. Having already delivered 10 helicopters to operators in the region, Ireland-based Waypoint announced it will open a Latin American regional office in Rio de Janeiro next January. The office will be headed by Steffen Bay, the company’s vice president of sales and marketing.

Latin American show took place last month, as regional economy struggles and growth stalls by Ian Sheppard

For the past two years those visiting the Latin American Business Aviation Conference & Exhibition (LABACE) in São Paulo have been disappointed to find cold and drizzly wintry weather. This year, deteriorating temperat-}

ures and blue skies prevailed right through the event (held August 11 to 13). However, Brazil’s economy and currency have gone in the opposite direction. With entrance fees raised to deter unqualified visitors, the official show entrance tally reached 9,819.

Once again, LABACE was staged at a makeshift site at São Paulo Congonhas Airport. Most of the major OEMs were present in force this year, including Dassault, Textron (Cessna, Beechcraft and Bell Helicopter), Gulfstream, Embraer, Viking Air (with its Twin Otter 400), Pilatus and Daher, in some cases represented by local dealers. Even an ATR twin turboprop regional airliner squeezed in, demonstrating how half of its cabin can be outfitted with VIP seats. In fact, the whole site setup was delayed while the ATR was brought through the hangar to reach its parking place on a static display occupied by 48 aircraft.

Unlike most business aviation shows, the Latin American event offered little in the way of news and no planned press conferences, only an opening session and a couple of seminars. Meanwhile, in true Brazilian fashion the main exhibition tent started to fill only in mid-afternoon, after a midday opening each day, but then continued to be busy until 8 or 9 p.m.

Various local and international companies were present, although one theme that was less prominent this year was the Local business aviation airports–with only Catarina, to the west of São Paulo toward Sorocaba, exhibiting. In fact, Catarina is the only airport that looks likely to be built. (See article on Brazil’s airports on page 32.)

Getting better access to airports for business aviation continues to be a theme in Brazil. The situation is summed up in some ways by the nature of the LABACE show, squeezed into a corner of the Congonhas Airport site while it looks for a better, more permanent home. There was talk again of its moving to Campo de Marte to the north of the center of São Paulo, a popular helicopter field with a good exhibition center close by; or to São José dos Campos or, eventually, to somewhere like Catarina once it is operational. Moving to Rio is perhaps a possibility but certainly not for next year, when the city is hosting the Olympics. At press time ABAg already had indicated it might try to shift the dates of LABACE 2016 from mid-August to late August, after the Olympics close, but Congonhas will still be the venue.

One issue that received attention was education and training, with Embry-Riddle Aeronautical University there as a show sponsor and heavily promoting its involvement in the country, which dates back several decades but has only recently regained significance, offering a range of courses and initiatives to engage Brazil’s young, aeronautically minded people.

No Growth

LABACE didn’t grow this year. It was much the same as in 2014 except with fewer aircraft on the static display, although that wasn’t really noticeable. While HondaJet was the most prominent debutant–the company took a large chalet spot right in front of the main hangar—the Cirrus Cessna Citation Latitude and Embraer Legacy 450 were also stars of the show, with the company announcing receipt of Brazilian certification of the aircraft on the opening day. Embraer was present in force though it didn’t bring a Lineage, and Dassault and Gulfstream were planted at the south and north ends of the static, respectively.

The final question for all these exhibitors, however, is when this show–now established as the main bizav event in Latin America–will become as large a Brazil event as this year’s ABAg, with more of a show for the region. ABAg director general Ricardo Nogueira was insistent that the exhibitor list reflected accurately the demand for aircraft and aircraft-related products and services in the various countries, but this didn’t ring wholly true when there are FBOs in various parts of South and Central America that weren’t present. So, does the region need a Latin American Business Aviation Association as an umbrella? There are no signs that any such organization is waiting in the wings.
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As cockpit technology advances, one thing never changes: The Best Safety Device in Any Aircraft Is a Well-Trained Crew. The advanced-technology systems built into today’s aircraft offer many benefits and advantages. While the understanding and appropriate use of automation are important, developing and maintaining core airmanship skills are paramount, especially in emergency situations. A crew’s first focus in an emergency should be flying the aircraft and maintaining or working to return to stable flight. Only when the plane is under control should attention turn to analyzing the situation, determining the cause and, finally, taking corrective action. A new series of courses from FlightSafety enables crews to experience and recover from challenging situations – based on analysis of actual incidents – that demand solid flying skills, swift and accurate decisions and precise communication.

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Slowing economy hinders airport projects in São Paulo

by Richard Pedicini

As commercial and business aviation grow in Brazil, and especially in São Paulo, they compete for limited airport infrastructure. The populist federal government has explicitly stated that commercial aviation has priority for airport real estate and slots at the large airports of Guarulhos, Campinas and Congonhas.

Plans for several new dedicated business airports (Aerovale, Catarina and Rodoanel/Harpia/Aeroparque) and one privately owned commercial airport (Caieras) have been announced in recent years, and Sorocaba Airport, owned by the state rather than federal government, has broken ground on a new control tower. However, Brazil’s current economic crisis has slowed all aviation growth and scaled back or halted many airport projects.

Mixed-use Airport Plans

Guarulhos (or Cumbica) Airport (GRU) carries more than 10 million passengers a year. Ambitious expansion plans call for new terminals, runways and parking garages, but published plans include no specific provisions for business aviation.

To meet future metropolitan aviation needs, a proposal was floated to build a new commercial airport in Caieiras, 22 miles/35 km northwest of São Paulo financed by $9 billion real (US$2.7 billion) in private capital. However, in January this year the president vetoed the bill that permitted privately owned airports.

Dedicated Facilities for Business Aviation

Of all the proposals for new airports, the Rodoanel dedicated business aviation airport is the closest to São Paulo’s business center. Launched with some fanfare and with a battery of political and aviation luminaries in attendance, the project met with opposition citing its environmental impact, a concern that has been raised for other airports as well.

AIA was told soon after the launch that the project partners had not purchased the land but only had an option to buy. Before LABACE, an industry executive characterized the project’s obstacles as “political in nature” and said, “It’s not going to happen at this time.” So far there has been no construction.

Aerovale in Caçapava, beyond São José dos Campos toward Rio de Janeiro, predates all other business aviation proposals in the São Paulo region, having begun the regulatory process in 2009 and started construction in 2012.

The airport was planned to be viable as a business condominium with an airstrip serving tenants. Owner and sole investor Roger Penido claimed that when the new law passed allowing private business airports to charge landing fees, “the Secretary of Civil Aviation called and asked if we’d like a permit.”

In January the airport projected a June opening, but as of press time 69 percent of the work had been finished, and the runway was in the completion stage. In March a federal prosecutor, alleging environmental and wetlands violations, persuaded a judge to freeze construction. News accounts in April said the firm had filed for protection from its creditors, although the debts in question are said to be small in comparison to the investment in the Aerovale project. The airport’s marketing director, Noeli Penido, told AIA before LABACE, “The project is going ahead and we predict that everything [runway and business building lot] will be ready by the end of 2017. We hope to ask for certification of the runway by June 2016.”

São Paulo Catarina Aeroporto Executivo is part of a development that includes an operating retail outlet mall and a projected high-rise office park and residential condominium.

The Catarina development is at the 37-mile/60km point on the Castello Branco highway, in São Paulo’s neighbor city of São Roque. The airport will occupy 1,285 acres of the 1,730-acre site. Plans call for moving 14 million cubic meters of earth to create the airport, and more than half the earthmoving had been done by February, with construction impounded by November. Project developer JHSF told AIA that “work is on schedule” for inauguration of the first phase of the airport, including the main runway, in next year’s first half.

The Catarina project’s obstacles as “political in nature” and the federal airport administration company Infraero won’t be forthcoming from the current administration. JHSF’s procedure that predates the current populist administration. JHSF’s developer JHSF has secured include permission to charge fees for airport operations, obtained from the federal Civil Aviation Secretariat; construction permits, from civil aviation agency ANAC; airspace circulation permission, from airspace authority DECEA; environmental licensing, from state environmental agency CETESB; and other state and city authorizations. Catarina’s developers hope it will become an “international business airport” since its 8,103-foot main runway will accommodate jet aircraft capable of long-range operations. But it’s a long road to obtain permissions from agencies such as the tax authorities and the federal police.

At Brazilian international airports, private jet passengers are requested to use designated terminal to get in line for immigration along with commercial passengers, a procedure that predates the current populist administration. JHSF’s that “maintains a permanent dialogue with airport regulatory authorities” for international licensing and on-site customs and immigration under scores the size of the challenge.

The Catarina Business Airport project includes space for MRO facilities, FBOs and leased hangars.

Finally, Sorocaba Airport’s proximity to São Paulo (a little over an hour by car), its 4,859-foot runway and a business-friendly local government have attracted major business aviation facilities. Gulfstream and Dassault Falcon have MRO facilities at the airport, and Embraer inaugurated a new MRO facility and its branded FBO there this year. Next to Embraer’s facilities, a projected high-rise office park and private jet passengers are expected to happen at this time. So far there has been no construction.

BIA spoke at LABACE with representatives from JP Martins Aviação, which operates two hangars at Campo de Marte. ABAG alternate counsel Paulo Martins told AIA, “These are the choices, for its commercial appeal. An Airbus or a Boeing Business Jet couldn’t land at Campo de Marte. But Marte is usable for nearly all the other aircraft that are at LABACE. If for some reason Congonhas can’t be used, Campo de Marte is the first alternative.”

—Richard Pedicini
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GE mulls U.S. turboprop MRO

by Mark Huber

GE Aviation is contemplating construction of a U.S.-based overhaul center for its H-series turboprops, according to Matt Gerus, GE Aviation senior marketing manager for turboprop engines. “As the fleet size grows we are seriously taking a look at putting an overhaul shop in the U.S.,” Gerus told AIN. At present, engines needing overhaul are shipped to the Walter factory in the Czech Republic. Shipping takes seven to 10 days each way. GE bought Walter Engines in 2008. Walter is best known for its M601 turboprop engine, with more than 1,500 produced since 1975. After it acquired Walter, GE took the core of that engine’s technology and combined it with advanced materials and design features such as a new compressor section with a two-axial blisk ahead of a centrifugal third stage. This improved engine became the basis for GE’s new H series of turboprops, and the H75 (750 shp) has been selected to power the Nextant G90XT, a remanufacture of the 90-series Beech King Air. Nextant expects to receive certification for that aircraft in the third quarter of this year.

“GE undersold how good this engine is,” said Jay Heublein, Nextant executive vice president of global sales and marketing. “Our performance data shows a 10- to 12-percent improvement in specific fuel consumption over the standard PT6 engines, which is just incredible.”

Protracted Inspection Intervals

TBO for the H75 will be 4,000 hours. However, not all overhauls are created equal, Gerus noted. Averaging around $200,000, the GE overhaul encompasses not just the turbine but the propeller governor and fuel control unit as well. “You are pulling the whole engine off; you don’t have to pull components off at weird intervals and send them back individually. When you get the engine back from us, all of the relevant accessories have been overhauled.” The H series requires no midlife hot-section inspection, uses a fuel slinger instead of fuel nozzles and employs an axial stage compressor instead of reverse flow.

“On a PT6 you typically have a 200- to 400-hour fuel nozzle cleaning regime, which we completely avoid. There’s no maintenance to the fuel system at all,” Gerus said. “Because we don’t have clogging nozzles or hot spots in the combustion chamber, you get even thermal...
distribution and we can avoid the hot-section inspection.”

There are relatively minor inspections required on the H75, and GE is phasing them to coincide with required inspections on the G90XT at 100-, 300- and 900-hour intervals. The H75 comes with a 1,000-hour/24-month warranty, but Gerus said that GE is looking to extend it. GE also currently does not offer an hourly maintenance plan for the engine, but that could also change as the number of engines in the field grows, Gerus said.

“Turboprop annual utilization is typically low and the ownership cycle is six to seven years. The first two owners don’t need to worry about overhaul; it is the third owner who is going to bump into it. Convincing the first guy to pay for an hourly maintenance plan is tough. An aircraft on the program is worth more in the marketplace, but you need to convince the owner of that and create that value. Remember, the first owner is paying for something he may never use. The valuation services, banks and insurance companies also will play a role in generating greater acceptance among turboprop owners, and there are distinct benefits from being enrolled. It gives the owner piece of mind, knowing what maintenance costs are going to be.”

Program Update

GE is making progress on its other turboprop programs as well, according to Brad Mottier, vice president and general manager of business and general aviation and integrated systems.

GE is also working with agricultural aircraft manufacturer Thrush to certify the H80 to run on diesel fuel, currently 30 to 40 percent less expensive than jet-A.

Demand to burn diesel is coming mainly from operators in South America, and some Brazilian operators are already flying with it. A demonstration program was recently completed with the EASA. While those test results are pending, GE is working with the EASA and Brazil’s ANAC to certify diesel in the H series. “We think it’s going to be a big deal,” Mottier said, noting the Russians’ long experience with running the Walter M601, the progenitor of the H series, on diesel for ground power units. However, Mottier cautioned that regulatory barriers make approval of diesel for the H series in the U.S. unlikely in the near term.

Mottier noted the July first flight of the Let L-410NG, a 19-seat twin turboprop powered by 850-shp H85s. He said GE worked with Let to develop new gearboxes that reduce the propeller speed to 1950 rpm from 2080 rpm. GE is also working with Ikhana on the Twin Otter H series modification that is under development. Meanwhile, work continues on the single-lever EEC power unit GE subsidiary Unison Industries is developing for the Nextant G90XT. The EEC is coupled with a backup mechanical fuel control unit and has automatic torque, speed and temp limits that prevent exceedances and thereby bring down the cost of engine overhauls.

Mottier said that GE is positioning itself to be the engine provider of choice for the next-generation regional turboprop and would take advantage of any related business aviation applications. Research on this front is continuing at the GE research center and wind tunnel in Oklahoma alongside Dowty’s concept of a new generation of propellers.
... adjacent to the gust lock, which was responsible for activating the safety system that prevented the aircraft from taking off. The second pilot, who was the captain, did not notice the gust lock since it was engaged and continuously engaged during the entire flight.

After the second pilot failed to notice the gust lock, the flight crew deviated from approved procedures and training that left the gust lock engaged and attempted to continue takeoff with a recognized aircraft anomaly, rather than prompting an aborted takeoff procedure.

The aircraft owner further notes that "an informal technical inspection on nine in-service GIVs found that with the gust lock in the up/on position, the forward throttle movement varied from 18.2 degrees to 24.2 degrees from the throttle lever's full-aft position." Addressing the issue of whether the GIV met the design requirements of Part 25 certification, the owner continued, "The GIV gust lock system was required to comply with 14 CFR §25.679, which mandates that, if the gust lock system, when engaged, prevents normal operation of the control surfaces by the pilot, then it must either "automatically disengage when the flight crew deviated from approved procedures and training and left the gust lock engaged and attempted to continue takeoff with a recognized aircraft anomaly, rather than promptly executing a coordinated abort procedure," the owner says. The probable cause of the accident, the owner's submission proposes, "was the failure of the gust lock. Mechanical lever interlock to restrict the movement of the power levers to a maximum of 6°/11° above ground idle with the gust lock system engaged, which allowed the engines to produce enough power to accelerate the aircraft to rotation speed (VR) without 'unmistakable warning' to the flight crew that the gust lock was engaged." The owner also cites these contributing factors:

- The lack of any GIV crew alerting system indications (warning or caution lights or aural warnings) that the gust lock was on with the engines running.
- The failure of the accident flight crew to perform a proper flight control check after engine start.
- The lack of a gust lock mechanical interlock override system (similar to the G10 and G200 systems).
- The flight crew's attempt to abort the takeoff with insufficient runway remaining after following the GIV Airplane Flight Manual (AFM) emergency procedure for an "Immovable Flight Control, Elevator Control (Pitch)" and guidance in the GIV AFM's line-up checklist regarding the expected delay in rotation if the flight power shutoff handle is pulled at rotation due to a flight control problem.

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India’s bizav group seeks new classification system

by Neelam Mathews

For the first time, India’s Directorate General of Civil Aviation (DGCA) is proposing to allow different regulatory codes for aircraft based on their all-up weight. The new policy would define two categories of aircraft: more or less than 5,700 kg (12,566 pounds).

The country’s Business Aircraft Operators Association (BAOA) has welcomed the DGCA report proposing this change as a positive first step toward regulations more suitable for non-airline operations. Reacting to the DGCA report, the BAOA is further asking for separate standards and recommended practices for scheduled and nonscheduled operators; currently the two types of operation are lumped together under many of the same rules. The association has suggested subclassifications for the two categories.

“You cannot equate a small operator flying three aircraft of Challenger 605 weight class, for instance, with an airline operating 70 narrowbodies,” said BAOA managing director R.K. Bali. The association has recommended that business aircraft be separated into above-5,700-kg and below-5,700-kg categories. The same distinctions should apply to differences between business aircraft and commercial jets, he said, as each category needs “different rules for crew licensing, extended twin-engine over-water operations [Etops], medical certification and [crews'] minimum flying hours.”

Relief is also being sought on restrictive flight- and duty-time limitations, which for smaller aircraft, BAOA says, should be based on India’s “domestic requirements for air connectivity….”

The DGCA is also in the process of finalizing an e-governance plan that will enable all aircraft operators—to process approvals and clearances online. The list includes more than 90 items and will be in place by year-end. Users will be able to access it by March 31 next year. This will be a boon to business aviation in particular as it “will reduce timelines for clearances, given the DGCA’s undersized manpower,” Bali told AIN. He added that business aircraft often suffer delays in official approvals because the DGCA is short of staff.

A private charter operator told AIN the new plan would introduce transparency and deadlines would have to be adhered to.
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U.S. Customs tuning in to business aviation

by Kerry Lynch

The U.S. Customs and Border Protection (CBP) is turning its attention to business and general aviation with plans to establish a working group that will delve into various industry issues. CBP Commissioner Gil Kerlikowske announced the plans for the working group during a recent meeting with NBAA president and CEO Ed Bolen.

While details weren’t revealed, Doug Carr, vice president of regulatory and international affairs for NBAA, said the group likely will be similar to advisory groups CBP created for air transport and cargo.

To begin meeting later this year, the group will provide a venue to raise the visibility about concerns specific to business and general aviation, Carr said. From a business aviation standpoint, a number of Customs issues have centered on processes that were established for airline operations, but are not as appropriate for business aviation. The group will provide an opportunity to educate and heighten awareness about the unique requirements of business aviation, Carr said.

As important, he added, the effort would enable the industry to work more collaboratively with Customs. Bolen said that during his meeting with Kerlikowske, they “also identified further opportunities for collaboration, with a goal of simplifying business aviation procedures while maintaining an equivalent level of safety and security.”

Facilities for Business Aviation

CBP has worked with the business aviation community on several issues in recent years, such as improving the processes for the Southern Border Overflight Exemption and pre-clearance restrictions in Shannon, Ireland. More recently, Customs has teamed with the industry to re-establish a presence at Van Nuys, Calif., following a nearly decade-long absence, and to open a new facility in Columbus, Ohio.

But Carr noted several issues remain regarding entry into the U.S., from availability at locations and hours at Customs service to Global Entry requirements that funnel business aircraft passengers into the commercial terminals.

The new working group is expected to focus on expediting business and general aviation arrivals into the U.S., NBAA said, adding it is pushing for improved facilitation of N-registered aircraft returning to the U.S. and streamlined processing requirements for international arrivals.

The business aviation community is continuing to work with Customs to establish bases at new locations or to return to former locations, Carr noted. He pointed to Van Nuys, noting it is “huge” for general aviation in that area. But Customs formerly was located at several of the airports in the region frequented by business aviation and pulled out about a decade ago.

To attract a Customs presence, FBOs have been investing in and building the facilities to Customs’ standards. But Carr noted that the requirements for Customs facilities are designed for processing passengers arriving at airline terminals rather than business aviation terminals, standards that create a challenge for the FBOs.

In addition, attracting such a presence requires Customs resources, which means investment on the government’s end.
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Carr acknowledged that this can be an obstacle. But he also noted that Customs is one of the government’s top revenue raisers. Negotiations are under way at several more locations, Carr said, noting the Mid-Atlantic and Northeast regions of the U.S. are among the general areas that have business aviation communities seeking greater access to Customs. “There are communities we hear from regularly” seeking expanded Customs, he said. “There are some hot spots.”

Beyond securing new Customs facilities, NBAA also is hoping for improved accessibility at existing facilities. Some have limited hours, which make nighttime arrivals difficult. NBAA believes one way to take the pressure off U.S. arrivals is to expand the CBP presence at foreign pre-clearance facilities before U.S. operators return home.

Global Entry is another program that Carr said could be tailored better for business aviation use. A number of locations do not have access to Global Entry or must channel through the commercial terminals. “General aviation gets introduced into an airline system that really isn’t designed to do what business aviation needs it to do,” he said.

That concern is thematic with a number of Customs programs, including eAps (the electronic advance passenger information system). Carr noted the business aviation community has a high rate of compliance, but the format is still designed for airline use.

Another target area is Southern Border Crossing Exemption requirements, he said. “We’ve seen a great improvement in Southern border overflights,” he said. Customs in 2013 expanded the accessibility for the exemption permitting aircraft without a passenger aboard to bypass designated portal airports before entering the U.S. But the association believes the process can still be improved for business aircraft, Carr said.

CBP working on options for bizav

Continued from page 42

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Reynolds Jet takes over Procter & Gamble site

by Mark Phelps

Charter/management provider Reynolds Jet has signed a long-term exclusive lease on “Hangar 4,” the former Procter & Gamble corporate flight headquarters at Cincinnati Lunken Field. Reynolds Jet will offer its charter and managed-aircraft clients controlled hangar space (more than 27,000 sq ft); direct fueling from the on-site fuel farm; on-site third-party maintenance up to major inspections and repairs; ground-handling service such as offloading luggage, handling and positioning, fueling and servicing.

“Reynolds Jet is excited to have the opportunity to bring some new life to the Hangar 4 site,” said Allan Mann, v-p of operations for Reynolds Jet. “In addition to the hangar space under roof, the Hangar 4 site includes 60,000 sq ft of ramp area; more than 20,000 sq ft of passenger lounge and shop space; garage parking for 16 cars; and a secure, coded-gate 17,000-sq-ft outdoor parking lot. All told, the site’s footprint is 217,355 sq ft.

Hangar 4 was built in the 1920s as the Aerocona Aircraft factory, builders of one of the first successful light aircraft in the U.S., the C-2 “flying bathtub.” Procter & Gamble acquired the site in 1950 and it became home to its fleet of corporate DC-3s. It has been upgraded and enlarged several times since then, and Procter & Gamble left the site in 2006. Reynolds signed a lease last month that gives it control of the facility until 2037.
Operators ready for Cuba flights
by Kerry Lynch

The White House campaign to thaw relations with Cuba is not only sparking new interest in travel there, but also is gradually easing the process of getting there. However, trade and travel restrictions remain.

On August 14 Secretary of State John Kerry raised the flag of the U.S. Embassy in Havana, Cuba, for the first time in 54 years. That act was symbolic of the renewing of relations that President Barack Obama set in motion last year. Obama announced in December that he planned to take a number of initiatives to re-establish ties with the Caribbean nation and facilitate travel and trade. These initiatives have had a direct effect on business aircraft travel there.

Specifically, two key changes have eased the process for passengers and operators. The first, which came earlier this year, involved a regulatory change that essentially eliminated a requirement for passengers to obtain a license through the U.S. Treasury Department’s Office of Foreign Assets Control before traveling to Cuba.

The Second Big Change

The second significant change came on July 21. The White House removed Cuba from the list of State Sponsors of Terrorism. One of the results of this action was the elimination of a requirement for passengers to obtain a temporary sojourn license from the U.S. Department of Commerce Bureau of Industry and Security (BIS) before flying to Cuba.

That was a major step for operators. “The approval process has been difficult,” said Doug Carr, vice president of regulatory and international affairs for NBAA, who added that it used to take some operators several months to obtain a temporary sojourn license.

As the White House has taken these steps, the number of parties interested in traveling to Cuba by private aircraft or charter has picked up notably, said Keith Foreman, a master trip support specialist for Universal Weather & Aviation. In fact, Foreman noted that he is often spending anywhere from half the day to the entire day working with parties making inquiries about Cuba travel.

The issue has begun to attract so much interest that Universal Flying Adventures, launched a Cuba flight-planning service and escort travel service during EAA AirVenture at Oshkosh, Wis. Almost immediately, Parker had 500 aircraft owners ready to sign up, he said.

Carr noted that operators and travelers have been laying the groundwork for travel to Cuba for some time. “People are trying to get ahead of the curve for when the restrictions relax,” he said, noting that NBAA gets calls weekly from interested parties.

Priester Aviation is among the operators that recently undertook the extensive and timely process to receive FAA approval for travel to Cuba. This was done even though the charter and management firm hadn’t previously received a huge influx of requests.

“Although Priester had not experienced a huge demand for
Continues on next page»
flights to Cuba, we wanted to be in a position that allows our clients to be restriction-free,” said Cory Ruffolo, vice president of marketing for Priester.

But the interest level changed after Priester announced it had obtained U.S. government approval. “We received an inflow of trip requests. We are still experiencing flow of inquiries daily,” Ruffolo said, adding that interest comes from both aircraft owners and would-be travelers. Within the first several weeks of receiving clearance, Priester began planning the first three trips in and out of Cuba.

Despite the significant steps toward the opening of channels between the U.S. and Cuba, the trade embargo remains in place and White House actions did not lift existing restrictions on travel; those actions would require congressional action.

Travel remains limited to 12 categories related to education, research, athletics/public performance, humanitarian, missions, journalistic activity, government business, and certain export transactions such as information exchange, among others.

Charter operators also must still have the U.S. FAA add Cuba into their approved operations specifications. To obtain Ops Spec approval, Priester needed to work with the Treasury’s Office of Foreign Assets Control, along with its local FAA Flight Standards District Office in Chicago and FAA headquarters in Washington, D.C., to satisfy all the necessary requirements, Ruffolo said.

Flights to and from the U.S. must go through one of about 20 “portal” airports, and commercial and private operations must secure landing permits from Cuba. But the landing permissions have changed. Once limited to passenger drop-off and pick-up only, aircraft are now permitted to stay one night and are authorized to make one flight while in Cuba, Foreman said.

Expect Changing Rules

Requirements for travel to Cuba remain dynamic. “It is all changing,” Parker said, noting that regulators are still catching up to the changed requirements alongside operators and travelers. Foreman met with Commerce Department officials in mid-August, when they advised of the changes in temporary sojourn licensing requirements and the landing permissions.

More changes could be on the horizon. At least three bills have been floating around Congress to ease the travel and trade restrictions, but it is not yet known when or if action will be taken.

As more people seek to travel to Cuba, there are several outstanding concerns. While most business aviation traffic goes into Havana, Cuba has a number of other airports. But much of the infrastructure there remains an unknown.

Also, Foreman noted, access to parts for an AOG is one of the top concerns. Parts are not readily available, and the export of replacement parts for aircraft repair had not been authorized. This is one of the issues that the industry has been working with the U.S. government to try to remedy.

Further, many insurance carriers have restrictions in their policies against Cuba travel. Foreman advises operators and travelers to keep an extensive paper trail for travel to Cuba. The U.S. government can always go back and check to make sure travel was for intended purposes, he warned. Violators could face stiff penalties.

But Foreman is not as concerned about the permitting on Cuba’s end. This process could take as little as a few hours in cases of emergency to two to three days for the typical permits. “Cuba has always been receptive and welcoming,” he said, adding that the stumbling blocks have been on the U.S. government’s end.
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Market poised to pick up again after a typically slow summer

On Wall Street there’s a saying that goes, “Sell in May and go away,” which alludes to the market’s typical seasonal slowdown that begins in the summer and carries into early fall. It peaks more to the low volume of stocks bought and sold, presumably as traders take summer vacations. While it’s more a clever quip than sound investment advice, the same type of behavior seems to descend upon the used jet markets, as owners light up turbines and launch on omnidirectional paths to fun-in-the-sun destinations. September almost always brings a back-to-work attitude when it comes to aircraft buying and selling, and this year is poised to stay true to form.

Despite the anticipated cyclical lull, current inventory, surprisingly, sits below both the year-ago level and the 12-month moving average and never saw much of the typical summer build. This past December saw a multiyear low of 2,217 aircraft for sale, and that number has gained about 50 as we enter what is typically the most active sales period of the year. The summer slowdown can actually be beneficial to a broker whose inventory is often left uncomfortably low after a busy spring. The summer respite affords the opportunity to rebuild listings to be ready when buyers return to the market in greater numbers during the last four months of the year.

While inventory has been whittled down, prices continue to adjust, in most cases downward, but recently in a more linear fashion than the drastic drops in the recent past. Aircraft age, price, popularity and location are some of the catalysts that can directly affect the time an aircraft spends on the market. Consider that over the past six months a Citation XLS spent 494 days on the market, while its successor model XLS+ spent just 113 days. The popular super-mid Challenger 300 has averaged about 260 days on the market during that same time span and the Gulfstream G530 only 229 days. Models that are in favor at any given time can spend even less time. Consider the Falcon 2000EX EASy: with few to choose from, the time on market is only 173 days.

Chinese Market Slowing

JetNet shows 28 aircraft for sale in China, or about 10 percent of the aircraft registered there. That’s not an inordinate amount by any means, but the fact that 10 of the 28 were placed on the market within the last three months might be more telling. Several months ago an industry counterpart who used to be quite active in China shared with me that China overbought, and since that time signals have emerged to lend credence to his statement. Other anecdotes have circulated about ready-to-deliver aircraft earmarked for China that are instead calling the manufacturer’s floor home for now. Some appear to be deals, while others seem to be priced above market. Perhaps the recently devalued yuan will allow willing sellers to part with their aircraft, but for now we’ll keep a watch on new market entrants as well as the day counter for aircraft already listed.

Exporting from China may require jumping some hurdles. With an attractively priced, readily available supply of used aircraft elsewhere, prices will have to be compelling enough to attract buyers. While the 10 that recently hit the market have been out there for only a short period of time, another 12 have been on the market for more than 400 days and some of those significantly longer than that. With a handful of exceptions, most of the offerings in China are large-cabin aircraft, including ACJs, BBJs, Lineage 1000s and Legacy 650s, G550s, Globals and the Falcon 900LX and 7X and the like. Most are 2010 model year or newer.

A Europe-based industry counterpart explained how challenging it is to sell anything in Europe unless it had an “N” registration. This is clearly where owners of “B” registered aircraft are likely to find their challenges. For serious sellers, the workaround might be to reposition the aircraft to a location allowing easier access to buyers.

Buyers returned to the market in full force last year. That activity has tapered slightly during the first two quarters of this year, but the breather seemed widely anticipated. While figures are not yet available for the current quarter, by many accounts it was more active than one would expect. As we head to the final and historically most active quarter, we could see inventory dip below last year’s multiyear low.

Bryan Comstock is a cofounder and managing director of aircraft broker JetEffect.
Pre-owned pricing instability remains

by Curt Epstein

As the pre-owned business jet inventory continues to shrink from its peak in 2009 at the height of the economic downturn, when approximately 18 percent of the fleet was available, to a current level of around 10 percent, according to industry data provider JetNet, prices of available business jets have yet to stabilize.

“[The market has] been pretty irrational for the last few years,” said consultant Gil Wolin, as he moderated a panel discussion on the topic at NBAA’s Regional Forum at Teterboro Airport. Formerly tried and true indicators of aircraft demand—such as rising U.S. corporate profits—have remained decoupled from the start of a new boom cycle, causing uncertainty to linger.

“The market is so fluid and so transient that, quite frankly, if I just did a G550 thirty days ago, I’d have to start from scratch again today,” said Joseph Zulueta, a licensed aircraft appraiser and managing partner of Florida-based Aeronautical Systems.

Expect Volatility

In the past, buyers and sellers would depend on aircraft valuation guides, but the volatility in pricing these days can leave those trailing the current values, according to some industry sources. “With the price guides, you need to realize that the minute you’ve got that book in the mail it’s already 90 days old,” said Zulueta.

Speaking at the JetNet IQ Summit in New York City in June, Steve Varsano, founder of aircraft brokerage The Jet Business, noted serious discrepancies between the values identified in the publications, on the order of several million dollars in some cases. “Residual values are impossible to forecast accurately, but what’s worse is you can’t even tell what something’s worth today according to the industry experts,” which he identified as Vref and the Aircraft Bluebook.

Varsano points to the crowded market as both a burden and a plus. More than 145 different makes and models are available for sale. “In the old days,” he said, “it was small, medium and large-cabin airplanes. Now every little inch, there’s another aircraft in between and they compete with themselves.” Despite that competition, he believes the sheer number of models will actually serve as an eventual brake on falling jet prices. “There’s a squashing effect that is now slowing all those depreciating numbers. For example, a GV today is somewhere in the $12-to-$15 million price range, underneath that is a G450 and then there’s a GIV, GII and GIII; there’s not much room for these to go down even further because there’s too much support from other models underneath.”

Regardless, for the financial community, the focus on residual values is now sharper than ever, according to Michael Amalfitano, the former head of Bank of America’s corporate aircraft finance division. He noted that in the past, business aircraft in a stable market would depreciate on average 4 to 6 percent a year. “It didn’t matter what cabin class it was or how big it was, or how far it went, and after the financial crisis, there was an absolute bifurcation of cabin class,” he said. “The large-cabin marketplace, the midsize marketplace and the small marketplace, by cabin class, those are three different decay curves now.”

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When George Antoniadis launched PlaneSense offering fractional shares in the Pilatus PC-12, he raised a few eyebrows. Like the fabled David, he would be taking on Goliaths such as NetJets, Flexjet and Flight Options. But Antoniadis appeared to have even more working against him. PlaneSense was a startup offering shares in a 1,500-nm-range turboprop single while the other fractional providers flew a broad array of jets with far greater range and speed, not to mention sex appeal. Perhaps the biggest risk was that the aircraft was totally unknown in the U.S., and the manufacturer itself had no track record in America.

Antoniadis intuitively recognized that what seemed like his enterprise’s weakness would turn out to be its strength. Fast forward 20 years. Three major fractional ownership providers have disappeared, the second largest firm was swallowed by its competitor, and the launch firm and leader in jet cards dissolved under the wing of one of the two remaining giants.

Throughout all these industry climbs and descents, economic turmoil, consolidation and dropouts, however, PlaneSense stayed the course. Thanks to the clarity of Antoniadis’s vision, the company emerged stronger than ever, and it remains one of three major fractional providers that continue to be viable.

Why? “PlaneSense owners understand the unique capabilities of the Pilatus PC-12,” said Antoniadis. They take full advantage of the airplane’s exceptional ability to operate anywhere, particularly into small airfields off limits to jets, such as the 2,300-foot strip at Fishers Island off the Connecticut coast. And the PC-12 does that with unprecedented economy, dramatically lower ownership and operating costs than the least expensive jet program and with time differentials on typical trips that amount to mere minutes. Furthermore, while jets may claim higher speeds in the air, the Pilatus, with its ability to negotiate the shortest runways, can land closer to the ultimate destination, and that means less time on the ground.

Taking the Major Players

“In early 1994 we had been carefully watching the developments in the fractional ownership space,” said Antoniadis. “We were a small aircraft management company at the time, and I was thinking about how to make our mark in the industry. You can’t compete against FedEx with one truck, and you can’t start with 100 trucks either. So we tried to define a new space: we would find a cost-effective, modern-design aircraft; we would develop a product that was extremely cost competitive; and we would focus unrelentingly on service,” he said.

“We started thinking about turboprops, and we thought possibly a single-engine turboprop.” After numerous trips to Switzerland, Antoniadis was convinced: the PC-12 was the airplane to bet the business on, “and we did,” he said. “There is no question, the single-engine aspect was a big risk, but I felt that was counterintuitive. We went out and hired a team and started thinking about the airplane. We hired two engineers and a designer, and we started thinking about the airplane in a different way. We had people who had worked on other airplanes, and we were able to think about the PC-12 in a different way.”

The first PlaneSense PC-12 was delivered in September 1995. “We used it as a demonstrator, to attract clients,” he said. The second aircraft arrived six months later and the third a year after that in 1997. “Then we started accelerating,” said Antoniadis. While Antoniadis spoke with the manufacturer itself had no track record in America.
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Since acquiring its first Cessna CJ4 in 2011, Germany’s Hahn Air has used its pair of Citation CJ4s in scheduled airline service between Dusseldorf and Luxembourg.

CJ4s fly as mini airliners at Germany’s Hahn Air

by Curt Epstein

It might not be the first to try it, but for the past five years Germany’s Hahn Air has operated one of the world’s smallest international airlines, using only business jets. The Dreieich-based company currently conducts two scheduled flights a week, round trip between Dusseldorf International Airport and Luxembourg, using a pair of Citation CJ4s that see charter usage when they are not serving as mini airliners. According to manufacturer Cessna, the CJ4 is the first jet in its class to achieve authorization for use in airline service.

Maintaining scheduled service on a dedicated route—even only two flights a week—is a prerequisite for the company’s airline status and acceptance by the International Air Transport Association (IATA), of which Hahn Air is a member. According to the company, the heart of its business lies in the interline agreements it has established with hundreds of airlines. With an interline agreement, Hahn Air partners can sell their flights on the Hahn Air HR-169 ticket through travel agents in markets where they would normally not be able to sell their flights. These distribution services account for the major portion of Hahn Air’s business.

The carrier began operation as an independent regional airline in 1994 using turboprops such as the Swearingen Metroliner, and acquired its first business jet, a CJ2, in 2005. It then switched to the Beechcraft Premier I until 2011, when changes in IATA’s Operational Safety Audit (IOSA) warranted an upgrade to the CJ4, the first of which Hahn Air acquired in 2011. Another was delivered in December 2013, and a third last year replaced the original aircraft.

To pass the IOSA, which assesses the operational management and control systems of an airline and accommodates both FAA and EASA standards for commercial air transport, the twinjet required modifications, according to Hahn Air general manager and COO Daniel Rudas. These included installation of a lockable cockpit door, modification of the emergency exit floor path lighting, the addition of emergency markings to various potentially dangerous external protruberances such as the pitot tube, the angle-of-attack vane and static discharge wicks, and revision of the emergency information card at each of the eight passenger seats.

‘Wow Factor’

As a commercial carrier, Hahn Air codeshares with Luxembourg airline Luxair and also conducts connecting flights from major airlines to Luxembourg Findel Airport, transferring through Dusseldorf. Passengers who typically arrive on larger commercial aircraft are unprepared for their next leg of the trip, according to Rudas.

“Normally they don’t know what they are expecting, it’s not a GA terminal, and then they arrive at the airplane looking for a passenger jet and, oops, it’s a private jet,” he told AIN. “That’s the moment of the ‘a-ha’ and the ‘wow’ effect, and when we land, every passenger asks for photos. It’s nice.”

The 155-mile flight takes approximately a half hour. For the morning Luxembourg-bound segment passengers are provided with a cold breakfast; snacks are offered for the afternoon return flight, with self-serve coffee, tea and soft drinks always available. Tickets sell for between £250 and €500 one way, always available. Tickets sell for approximately a half hour.

While the company at one point planned expansion to 50 aircraft, it found neither the time nor the funding it needed as the country entered a recession and venture capital dried up. Several other ventures have tried unsuccessfully to provide per-seat operations on business jets.

Charter firm JetSuite signs on to FAA’s ASAP

by Matt Thibur

JetSuite is the latest charter operator to sign up for the FAA’s Aviation Safety Action Program (ASAP), which is administered by the Air Charter Safety Foundation (ACSF). JetSuite operates a fleet of Citation CJ3s and Phenom 100s and is headquartered in Irvine, Calif. According to JetSuite, it is one of fewer than 2 percent of Part 135 charter operators that has implemented an ASAP, which went live on June 15.

While JetSuite has implemented a safety management system (SMS), that is still not a regulatory requirement for charter operators. But the ASAP helps with the process because the voluntary reporting that is part of an SMS is also central to the ASAP, according to Robert Hamel, JetSuite’s safety manager.

Under the ASAP, reporters (pilots, mechanics, dispatchers and other personnel) have a mechanism for documenting any hazard or safety-related issue, without fear of punitive action by the FAA. Reports are submitted online and studied by JetSuite’s event-review committee. Reporters can also elect to fill out a NASA Aviation Safety Reporting System form automatically for that event.

If for some reason a reporter can’t get online right away, there is a process for calling a telephone number and leaving a message; the reporter then has three days to fill out the online form. “We want to make sure they have every avenue available to report an issue,” Hamel said, “in case they’re at an FBO and the Web is down.”

As part of the implementation of the ASAP, JetSuite issued a learning notice to its employees. They in turn must acknowledge that they have read the notice, Hamel explained, and this also gives them an opportunity to add any comments or concerns. “The initial feedback has been wonderful,” he said. “It’s been positive every time we talk to the pilots and mechanics.”

JetSuite employees’ reporting of issues in the ASAP also helps participants at other companies, because the ACSF shares de-identified information with ASAP-using members. This could help JetSuite see specific issues related to the types of aircraft it operates or engine flight or maintenance issues that arise among fellow charter operators.

Hamel recommends that more charter operators join the ASAP. “There’s lots of room for growth,” he said. “If they’re considering it and think they don’t have the resources, the first call should be to the ACSF; the people there can alleviate a lot of concern.” The ACSF, he pointed out, “does a lot of the heavy lifting, including working with an operator’s ASAP regional office to set up the memorandum of understanding that governs the program and provides protection for reporters.

“The process is relatively easy,” he added. “There’s really not much of a downside to it. It creates another avenue for pilots, mechanics and dispatchers to report safety concerns, and it will improve safety in our operation and others. And it eliminates the possibility of severe repercussions from the FAA.”
First-half deliveries

740 business jet deliveries worldwide this year to 717, slightly less than 2014’s total of 722. If that proves correct, it would snap the industry’s modest three-year delivery growth streak.

Volatile Global Markets

“While the second quarter generally improved over the first, our industry is still being buffeted by volatile global markets and contraction within the energy sector,” noted GAMA president and CEO Pete Bunce.

“There are reasons to be concerned, especially with energy market weakness and China and Russia, but it’s far from clear that it’s going to damage total numbers when North America still looks really good,” said Richard Aboulafia, v-p of analysis for Teal Group. “That might be the great irony in the whole thing: everyone put their faith in the BRICs and put their faith in the BRRICs and globalization just at the moment North America was roaring back.”

Among the major makers of purpose-designed business jets (that is, not bizliners) only Bombardier posted a gain in deliveries over the first half of the year, handing over 11 more aircraft in the first six months of the year than in the same period last year. Production of the new Challenger 350 continued to ramp up, as the company delivered nine more of the super-midsize jet than it did through the first six months of last year when it entered service. The Canadian airframer also nearly doubled last year’s first-half production of Learjet 70/75s, but the large-cabin Challenger 605 saw first-half deliveries fall by six aircraft from the 14 delivered in the first half last year.

Dassault will no longer provide individual model delivery information on Falcon business jets and instead will consolidate them under the civil aircraft category, the totals of which it will release twice a year. For the first half, the French OEM recorded 18 deliveries, compared with 25 in the same period last year.

“The beginning of the year is always slow,” said Dassault Aviation CEO Eric Trappier. The OEM said it still expects to meet its anticipated delivery total of 65 Falcons for the year. Embraer handed over four fewer jets in the first half of this year, for an 8-percent decline. The addition to its lineup of the Legacy 500 (five delivered in the first six months of the year) was balanced out by five fewer deliveries of the larger Legacy 600/650.

In Savannah, Gulfstream also noted a slight decline in year-to-year delivery totals, mainly among the smaller offerings, equating to a 5-percent slide. For Textron Aviation’s jet business, the first half was a mixed bag. While the Wichita manufacturer handed over two fewer jets in the first half of the year compared with the same period last year, of the eight models in its lineup, half saw upticks.

One Aviation, which began offering the Eclipse 550 last year (as Eclipse Aerospace), posted six fewer deliveries of the VLJ than it did during the first half of 2014. Among the heavy-iron makers, Boeing exceeded its first-half 2014 delivery totals with the addition of a private 777-300ER, while Airbus delivered two fewer ACJs over the same period. Embraer handed over one Lineage 1000 during the first half of the year, compared with two in the first six months of last year.

While turboprop deliveries overall declined by nearly 10 percent year-over-year, the high-end pressurized segment enjoyed a gain of 5.5 percent over the same period last year. Daher continued to ramp up production of the TBM 900, delivering five more through the first half of the year than in the same span last year. Piper improved deliveries of the Meridian by two for a gain of more than 14 percent year-over-year, while Pilatus PC-12 deliveries remained static at 18.

The turbine-powered helicopter segment also saw deliveries decline over the first six months this year compared with the first half of 2014. “It’s clear energy markets are affecting the rotorcraft world too,” noted Aboulafia. “The civil helicopter numbers look more like a certain trend than the business aircraft numbers do.” That softness was reflected in the overall helicopter industry billings, which fell by nearly 17 percent year-over-year.

As for the high-end pressurized segment, Embraer delivered two fewer ACJs over the same period last year, and Gulfstream delivered five fewer of its G650.

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AW109 GrandNew Sold in Brazil

On the opening day of the LABACE 2015 show, AgustaWestland announced the sale of an AW109 GrandNew helicopter to Cristalia, a corporate operator in Brazil. The aircraft will join the nearly 150 AgustaWestland light twins (GrandNew, Grand, and Power) operating in the country.

The GrandNew’s avionics suite has EFIS with synthetic vision and fully compliant GPS-based navigation equipment that allows for all-weather operations.

Orders for nearly 350 Grand and GrandNew helicopters have been placed by more than 210 customers in some 40 countries, according to AgustaWestland. Missions for these models include executive transport, higher-density passenger transport, law enforcement, emergency medical service, search-and-rescue, harbor pilot shuttle, maritime patrol and water pollution monitoring.

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**AAC Takes 90th Head-of-State Completion Project**

Associated Air Center signed a completion contract for a green Airbus A320 head-of-state completion for an undisclosed Middle Eastern customer. The project is the company’s 90th head-of-state completion, noted James Colleary, president of AAC. AAC’s Dallas facility received the ACJ in July, with redelivery scheduled for September next year.

The cabin layout will feature a bedroom, private lounge, dining area, large entertainment lounge and a staff area. A JetWave (Ka-band) Satcom system will provide onboard connectivity.

AAC currently has two widebody projects—a 747-8i and a 787—under way at its Dallas facilities. Both aircraft are scheduled for redelivery later this year.

**Amac Delivers Major Completions Projects**

After a two-year completion, Amac Aerospace of Switzerland has redelivered its first head-of-state Boeing 747-8i. The cabin incorporates custom furniture, exotic materials, bespoke artwork and peripheral cameras located around the exterior of the aircraft.

Bernd Schramm, Amac’s Group COO, said the project challenged the company with “new learning curves [that] have enabled Amac to refine and better our products and procedures, and given valuable insights into what is feasible” that will pay dividends “on our next widebody project.”

Amac also returned a BBJ3 737-900ER to service following a cabin interior reconfiguration that included upholstery for new seats and installation of electrical high-low tables and a new handmade carpet. Existing divans were modified to be more functional and comfortable.

Amac has also received a refurbishment contract for a BBJ 737-700, calling for reupholstering all cabin seats and divans and the addition of a customized handmade cabin carpet. The company is also scheduled to perform multiple cabin modifications on a 777-200 as part of a new heavy base maintenance contract.

**PAC Completes 747-8 Seating Projects**

PAC Aerospace completed fabrication and delivery of custom seating for four private 747-8s, the Florida-based company announced last month. The aircraft required more than 460 seats, 99 percent of them with full motorized operation, including track-and-swivel, slouching with leg rests, and six different types of lie-flat deluxe sleeper seats, as well as berthing divans. The projects required 17 new 16g certifications for forward, aft, side-facing and angled installations.

**Fokker, Comac Team on ARJ21-700 Bizjet**

Fokker Technologies is to be purchased by GKN for $760 million, the sale closing in the fourth quarter pending approval by employee representatives and EU and U.S. regulatory authorities. Company reps had not responded to AIN’s inquiries about the impending sale’s impact on Fokker Services operations by press time.

SmartSky, Jet Aviation Partner on Global Express Wi-Fi

Jet Aviation Singapore will convert China’s Comac ARJ21-700 regional jet into a business jet through a Netherlands-based joint development program. Plans call for final completions and outfitting to be performed at Comac’s Shanghai Aircraft Manufacturing division. Fokker’s previous regional-to-bizjet conversions include the CRJ700 and its own F28 and F70. Peter Somers, president of Fokker Services, said the company is “especially excited to be involved in the conversion of the first Chinese-built business jet.”

Meanwhile, parent company Fokker Technologies is to be purchased by GKN for $760 million, the sale closing in the fourth quarter pending approval by employee representatives and EU and U.S. regulatory authorities. Company reps had not responded to AIN’s inquiries about the impending sale’s impact on Fokker Services operations by press time.

Comac announced the first customer for a regional variant of the 90-seat jet last year.

**Performs Global 8C Inspection**

Jet Aviation Singapore has undertaken the interior refurbishment of a Bombardier Global in conjunction with the first 8C inspection of the aircraft performed in the Asia-Pacific region. The inspection is being performed at the company’s recently expanded MRO facility at Seletar Aerospace Park. The refurb project includes restoration of the aircraft’s woodwork, a soft material refurbishment, new flooring and complete refinishing of the cabin’s sidewalls and headliners.

Jet Aviation Singapore has an 80,000-sq-ft hangar.

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Airliners, military aircraft make debuts at GA gathering

by Kerry Lynch and Matt Thurbur

The 2015 edition of the Experimental Aircraft Association’s annual AirVenture in Oshkosh showed a resiliency in the industry, with attendance figures returning to 2005 levels, the number of new exhibitors on the rise and new aircraft on display.

Total attendance was up by a couple of percentage points to about 550,000, drawing attendees from a record 80 countries. About 140 new exhibitors displayed their wares, pushing the total to 800, and more than 10,000 aircraft flew in for the event. On one day alone, 3,100 aircraft movements were logged over a 14-hour period. This was the highest single-period total in more than three years, EAA chairman Jack Pelton said.

“Our final attendance figure continues to demonstrate strong excitement and renewed optimism for the wide variety of aviation activities offered throughout the week,” Pelton said. “AirVenture 2015 exceeded our expectations on many levels.”

The number of showplanes rose slightly to 2,686, including more than 1,000 homebuilds, almost as many vintage airplanes and an array of warbirds, ultralights, light sport aircraft, seaplanes, rotorcraft and aerobatic aircraft. AirVenture marked the first appearance of the F-35 Lightning II at a civilian airshow and the first time Boeing’s B-52H Stratofortress bomber was displayed on the ground at Oshkosh (the B-52 has done flybys in the past). The B-52 was stationed at Boeing Plaza near the Airbus A350, which also had marked its first demonstration at the airshow. “It’s a mix you will never see anywhere else on earth,” said an EAA spokesman.

Other highlights marked Burt Rutan’s decades of work, the NASA centennial, the 70th anniversary of the end of World War II, the 75th anniversary of the Battle of Britain and the Apollo 13 mission.

EAA created a “neighborhood” called Aviation Gateway Park designed to showcase imagination and emerging technologies. Pelton and Piper CEO Simon Caldecott opened the facility with scissors delivered to them by quadcopter. The locale featured an innovation center, a drone cage, education/career center and a forums area.

The 80- by 80- by 30-foot drone cage highlighted the focus on unmanned aircraft systems. It was used for flight demonstrations and daily drone flying competitions. Embry-Riddle Aeronautical University hosted a Small Unmanned Aerospace System (sUAS) Challenge that included both obstacle and speed courses. The EAA spokesman called these efforts a “new step for us” to prepare for the emergence of these technologies.

As in the past, AirVenture served as a forum for a number of government leaders, including FAA Administrator Michael Huerta and NTSB chairman Christopher Hart. As important to Pelton as the events was a return to the roots of the show. In recent years, the show drew criticism for the staging of certain exhibits along the flight line, for changes in volunteer procedures and for the perception that it was deserting its experimental and entrepreneurial roots. “I think what’s most important to all of us at EAA is that it really feels like we are getting back to our culture, and the vibe overall on the grounds and everywhere has been back to the community-family that we’ve been striving to get to over the last three years,” Pelton said.

But not all went according to plan. Wittman Field was shut down for a few hours after a Malibu Mirage crashed at 7:45 a.m. July 22. The airplane, N4BP, carried five people headed to AirVenture. Four exited the airplane by themselves and a fifth was assisted by the Oshkosh Fire Department and transported by helicopter to the hospital.


Airliners, military aircraft make debuts at GA gathering

The Boeing B-52H Stratofortress bomber was displayed on the ground at Oshkosh for the first time. However, the aircraft is no stranger to showgoers; the B-52 has done flybys in the past.

Aside from competition, safety innovation already was evident throughout the show: Icon grabbed early headlines, donating its first production A5 light-sport amphibian to the EAA Young Eagles program. Pelton and Young Eagles chairman and aerobatic pilot Sean Tucker took delivery of the aircraft, S/N 001, in a pavilion packed with Young Eagles and bystanders on July 20 in the opening hours of EAA AirVenture. The first A5 was granted an S-LSA airworthiness certificate following an FAA audit in June at the company’s facility in Tehachapi, Calif.

Powered by a Rotax 912 four-stroke engine, the two-place aircraft has foldable wings for ease of storage and can land on runway or water. It was designed with spin-resistant technology that may set a new standard when the Part 23 rewrite is released, and includes an angle-of-attack indicator and complete airplane parachute.

Textron Aviation provided a glimpse of its next turboprop project. The company is firming up design concepts for a new turboprop single that will sport a cabin “larger than is available today in this class,” said company senior v-p for engineering Michael Thacker. In recent years both Cessna and Beechcraft separately have studied concepts for a new turboprop single, and they combined those efforts after merging into Textron Aviation. Thacker said the aircraft will be neither a King Air nor a Caravan, but a brand-new aircraft. Textron Aviation also has introduced a light twin that an aircraft should have 1,500-nm range and cruise at no less than 280 knots.

In the meantime, the company debuted its Pro Line Fusion-equipped Beechcraft King Air 250 and announced that it had secured certification for not only the panel upgrade but also cabin enhancements. Similarly upgraded versions of the King Air 350 and C90GTx are expected to receive certification in the fourth quarter of this year and the first half of next year, respectively.

Cirrus Aircraft unveiled an SF50 Vision painted with a "Dude Air" motif in honor of Cirrus customer and country music singer Dierks Bentley. Approaching certification of the single-engine jet, Cirrus has begun development of the first customer aircraft. Work is under way on three production "pilot" units (P1, P2 and P3), said Pat Waddick, Cirrus president of innovation and operations.
The aircraft will be used to “prove out” the manufacturing sequence, he said. Cirrus is now moving toward obtaining type inspection authorization, which will enable the FAA “to sample our data,” he said. Cirrus also is continuing to refine features on the aircraft, including plans to make its mark on the Garmin G3000 avionics panel. Details on those plans are anticipated in coming weeks, Waddick said.

**Legend Aircraft** offered the Superior Air Parts Gemini diesel engine as a factory option for the light-sport Legend Cub. The 100-hp diesel engine will be available for both the wheel and float-equipped factory-built Legend Cubs as well as the kit-built version. Pricing for the diesel option has not been set yet, but should be roughly comparable to other engine options, according to Legend Aircraft president Darin Hart. The diesel engine fits into the Legend Cub cowling, so no modifications to the cow will be needed.

**Flight Design** revealed it has begun production on conforming prototypes of the C4 piston single and has expanded the flight-test envelope of the nonconforming model as the company works toward its first certified product. Flight Design hopes to earn EASA CS-23 certification for the four-place airplane next year, with validation from the FAA following after that.

The proof-of-concept first flew April 9 at Kamenz airport in Germany, testing basic handling. Primary parameters of the Continental IO-360-AF alternative-fuel engine also were confirmed. Since then, the airplane has completed a dozen flights, expanding the weight and center-of-gravity envelope. Flight Design’s work has continued through the government-industry consortium on the safety box for the cabin, which adopts crashworthiness concepts from the automobile industry to build a “safety cage” around the occupants.

**Tecnam** director of sales Shannon Yeager flew the first U.S. production four-place P2010 single from the company’s assembly facility in Sebring, Fla., to AirVenture. While the P2010 is certified in Europe, the U.S. validation process continues, and Tecnam expects to receive FAA approval by year-end so U.S. deliveries can begin. Tecnam has already delivered 25 P2010s in Europe. The production line is ramped up, and some slots could easily be diverted to U.S. customers, he said.

“Our next wave is the PJet,” Yeager said. Tecnam has been approached by two military forces (which it isn’t permitted to identify) to design a small two-seat jet that could be used for pilot training and scout missions. The PJet would have a podded turbofan mounted on top of the fuselage aft of the cockpit.

**Mooney International** has begun assembly of the proof-of-concept of its new carbon composite diesel-powered M10 and hopes to start initial flight trials in the next few months, said CEO Jerry Chen. First flight of the POC would come less than 18 months after Chen handed over the keys of the first Mooney International-completed single, an M20TN Aclaim Type S, during AirVenture 2014.

Mooney has completed scaled model wind-tunnel testing and has been verifying design concepts for the M10 series. The company is building the POC airplane at its facility in Chino, Calif., and plans two variants: the M10J powered by a 155-hp Continental CD-155 diesel engine and the M10T trainer powered by the Continental CD-135. Mooney plans to build three conforming models for the certification program, with approval anticipated in 2017. In the opening hours of AirVenture, Piper finalized an agreement with long-time customer FlightSafety Academy for Garmin’s GMA 350c audio panel gives pilots wireless access to numerous functions.

The Airbus A350 drew a large crowd for its first demonstration at the gathering of general aviation enthusiasts.

**Flight Design** unveiled the KI 300 solid-state attitude indicator, a microelectromechanical systems-based electronic display that replaces the popular KI 254/255/256, KG 258/259 mechanical gyros-based attitude indicators. The KI 300 with flight director retails for $5,995, a shadow of the $19,633 for a new KI 256. “We’ve been working on this product for a while,” said Roger Dykmann, vice president of marketing and product management. “The KI 256 has gotten expensive and difficult to produce.”

FreeFlight offered a new option for buyers of ADS-B upgrades in aircraft already equipped with Garmin 430W/530W navigators: integration with the FreeFlight Systems Range ADS-B system. The new interface capability also expands equipage flexibility for 430W/530W owners, according to FreeFlight. The Range FDL-978-XVR transceiver is available without an internal GPS, so the 430W/530W provides the GPS source. The Range provides ADS-B out and in on 978 MHz and thus can receive free ADS-B traffic and weather information for display on compatible mobile devices. Without the internal GPS the FDL-978-XVR costs $3,495.

**L-3 Aviation Products** and Aspen Avionics teamed on an interface between the L-3 Lynx NGT-9000 MultiLink Surveillance System ADS-B transceiver and Aspen’s Evolution primary and multifunction flight display systems, allowing display of ADS-B in traffic and weather on the Aspen screens. This includes showing Lynx NextGen Active Traffic advisory system targets on the Aspen displays. The connection between the NGT-9000 and Evolution displays is via an RS-232 interface. The advantage of having the two devices interconnected is that the pilot can opt to show information simultaneously, such as weather and traffic indicators. The KI 300 attitude indicator replaces mechanical instruments.

**BendixKing** unveiled its new option for BendixKing’s electronic display KI 300 attitude indicator replaces mechanical instruments.

The Airbus A350 drew a large crowd for its first demonstration at the gathering of general aviation enthusiasts.
at least 26 trainers. The contract includes 20 Warriors that will be delivered from September through December and six Piper Arrows slated to be delivered next year. The deal was announced just a few days after Piper revealed plans to lay off 15 to 20 percent of its work force. It will not alter Piper’s production or layoff plans, CEO Caldecott said. He noted that negotiations on the sale had been in the works for some time and had been accounted for in its planning.

Epic Aircraft provided a progress report on its E1000 single-engine turboprop, with assembly of the first two conforming prototypes and hopes to begin flight trials shortly. The first airplane, FT 1, is about two thirds complete and should fly in the upcoming weeks, said Mike Schrader, director of sales and marketing, at AirVenture. Work is under way on FT 2, and plans call for that airplane to fly in late fall or early winter with certification following in the first half of next year. Epic has secured all the key vendors, he said, although he conceded the company did encounter some delays with obtaining certain components from vendors.

Daher gave details about a new training curriculum that provides high-altitude hypoxia training. The French aircraft manufacturer teamed with Southern AeroMedical Institute (SAMl) to provide the training. Daher furnished a TBM 850 cockpit simulator depicting the Garmin G1000 glass cockpit and Zodiac Aerospace oxygen masks to provide a realistic training environment, said Nicholas Chabbert, senior v-p for Daher’s airplane business and CEO of Socata North America. The cockpit and masks are stationed within the SAMI hyperbaric chamber in Melbourne, Fl.

Huerta also discussed the Part 23 rewrite effort, saying, “The FAA will define safety and airworthiness parameters, thus giving designers a goal without telling them how to get there. As long as results meet the new Part 23 requirements, industry can make extensive use of the latest designs, materials and technology.” The FAA is expected to release a Part 23 rewrite proposal later this year.

General Aviation Manufacturers Association president and CEO Pete Bunce, who also attended AirVenture, pointed to both the third-class medical and the Part 23 rewrite efforts as key initiatives to attract new interest in aviation. Bunce characterized the declines of the pilot, engineering and other aviation workforce as one of the industry’s most concerning issues. “We have to recapitalize the workforce,” he said. There is no single answer to the issue, Bunce warned, but collectively the industry has to consider policy, wages, education and other tools to “bring in young people.”
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Bell eyes international markets

by Mark Huber

Part of Bell Helicopter’s strategy to expand its international footprint is evident in the company’s recent deal to manufacture Model 407 cabins exclusively in India. “We look at local content in the frame of the business strategy,” Patrick Moulay, vice president for global sales and marketing, told AIN. “Local content has to reduce overall cost structure and increase competitiveness as well as satisfy local government requirements for a given campaign. Everything we are looking at is more driven by the latter.”

“When you look at the size of the requirement for countries like India, China and Japan, clearly the governments want strong local content and strong partnerships with the local industry. That is something we are working on. We will be manufacturing all 407 cabins in India. Nothing is off the table if it makes sense for our business.”

Moulay expects the current softness of the civil helicopter market to evaporate by next year and predicted that select markets that might currently be viewed as difficult have great long-term potential for Bell, particularly Russia. “Over the last three years Russia has been a great growth story for us. We have more than twenty 429s flying in Russia and the CIS [affiliated Commonwealth of Independent States] and have been averaging more than 10 aircraft per year there. The collapse of the ruble did some damage. Some customers had to delay or cancel orders. But the potential is there.”

“The commercial aerospace sector still remains open to trade between the U.S. and Russia, as well as Canada and Russia, and we have a long-term view of our strategy in the country, not just what happens in the next six months. Russia is the next big thing, and we want to be part of it.”

Moulay sees Japan as another promising market. Bell intends to participate in upcoming Japan Defense Force (JDF) tenders for what is expected to be a substantial number of helicopters. Overall JDF spending has climbed steadily in recent years, partially in response to the perceived threat from China’s growing military power in the region. Bell already has a substantial fleet in Japan.

For the last 55 years Bell has partnered on select licensed and joint projects in Japan with Fuji Heavy Industries. In 2014 Bell formed Japanese subsidiary Bell Helicopter Co. and in March this year opened offices in Tokyo near Fuji.

Energy deregulation in Mexico, even with falling oil prices, should prove a catalyst for Bell to expand its installed customer base there. “We have been successful in the [Mexican] oil-and-gas segment. We sell a large number of 412s to the oil-and-gas producer market there year after year. We also have been successful with [Mexican] military forces,” Moulay said.

Moulay even sees potential in what has traditionally been a slow market in Africa. “We’ve received more tenders from Africa in the last 60 days than we have in all of the last year,” he said. “There is potential there, for sure.”
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**European helicopter operators consider adding drones**

by Thierry Dubois

Remotely piloted aircraft systems (RPAS) present new opportunities for helicopter operators and some industry representatives in Europe suggest operators supplement their fleets with these aircraft, which can fill roles that rotocraft cannot. Reaction to the idea among operators is mixed. One says it found the idea to be more complicated to implement than portrayed, and dismissed it as impractical.

Another operator (of fixed-wing aircraft) is all for drones: “If I were a helicopter operator, I would buy drones! If these guys don’t start using drones, they will be swept out of business one day or another,” advises Laurent Caillard, managing director and chief pilot of France-based Air Marine, which flies airplanes and RPAS for surveillance and inspection missions, among others. Caillard emphasized that a rapidly growing proportion of air-to-ground video today are filmed with RPAS, and he predicts RPAS at some point will replace manned aircraft for the mission. However, he believes helicopters will never be completely replaced, as there is no substitute for the human brain in assessing the big picture, he said.

Vittorio Morassi, chairman of the National Helicopter Association Committee of the European Helicopter Association (EHA), holds a similar view. “It would be a good idea for a helicopter operator to operate drones. It is important for helicopter operators to be aware of their possibilities. They could broaden the portfolio of services that helicopters render,” he said. They could replace helicopters on some missions, he continued, but on a limited scale-on surveillance, for example—because of their limited endurance.

Dominique Orbec, president of French helicopter lobbying association UFH, sees RPAS as a complement to rather than a replacement for conventional rotocraft. “An RPAS might be useful as a reconnaissance tool before a complex sling-load mission,” he said. Also, a helicopter would not be the right platform to take a close-up photo of an architectural detail, which could be better accomplished with a drone. He anticipates RPAS will replace helicopters for their current missions in only a marginal way. “Some have suggested unmanned air vehicles could be used for search-and-rescue, but this is unrealistic; nothing can replace the combination of a pilot and a doctor,” he emphasized.

**Operational Hurdles**

Gerold Biner, a pilot and the CEO of Switzerland-based Air Zermatt, has a cautious outlook but does see RPAS as a potential tool for search operations in the mountains.

Another Swiss helicopter operator, Air Glaciers, considered such a move last year. The main benefit would have been to avoid risking the lives of pilots and mountain guides by operating RPAS in poor weather or at night. However, the idea went nowhere, according to flight operator...
Rostec: high-speed rotorcraft, two other projects canceled

by Vladimir Karnozov

Russian government funding for three important helicopter projects has dissolved, according to Yearbook 2014, an annual financial summary released by manufacturing conglomerate Rostec in July. The three rotorcraft programs have been canceled. Rostec controls several Russian aviation entities, including Russian Helicopters. This is the first written evidence of major cuts in R&D funding for Russia’s long-term rotorcraft projects.

Rostec’s 2014 Yearbook reads: “The past year saw a significant drop in the amount of funds from the federal budget provided for R&D projects in the aviation industry, from ruble 16.5 billion down to 11.7 billion. At the same time, the industry invested more of its own funds into R&D: ruble 8.5 billion against 6.9 [billion] previously. The federal budget injections ran below earlier announced figures, and this was largely due to the fact that real work had been halted—with respective termination of the budgetary funding—on three projects led by Russian Helicopters: the High Speed Rotorcraft, a new multipurpose helicopter with an mtow of 4.5 [metric] tons, and a new lightweight helicopter with a mtow of 2.5 [metric] tons.”

The High Speed Rotorcraft—local acronym PSV—is the most significant loss. The project was started as an industry initiative in 2008. Kamov offered the Ka-92; MI came up with the Mi-X1. Both design bureaus displayed scale models at HeliRussia 2009. Design targets included range of 810 nm/1,500 km; and cruise speed up to 243 knots/450 kph. These initial designs gave way to Helicopter EMS and air-tour company Air Methods is on the acquisition prowl again. During a recent quarterly call with stock analysts, company CEO Aaron Todd revealed that the company is raising its credit line by $400 million with an eye to making an as yet undisclosed acquisition or acquisitions.

“We have been pretty open here recently that we’re in active pursuit for companies that we believe are available for purchase,” Todd said. “You never know until you actually see a transaction occur. But we’ve also indicated that we’re active both within the air medical sector as well as within the tourism sector. And I think the question that was previously asked, ‘Are these deals that could get done within the next six months to 12 months,’ the answer was yes and that’s probably about all I could offer at this point.”

However, the size of the potential war chest suggests Air Methods has its eyes on something far more substantial than its recent acquisitions of heli-tour operators such as Las Vegas-based Sundance, which it acquired for $44 million in 2012, or Blue Hawaiian, purchased for $66 million in 2013.

While weather cancellations and high maintenance expenses cut into Air Methods’ bottom line during the first half of the year, the company remains on strong financial footing as the largest helicopter EMS provider in the U.S.

“Flights missed because of weather, less favorable payer mix and collection rates, and higher maintenance expense have been headwinds for financial results year-to-date, as well as in the second quarter,” Todd said. “Despite this, we remain optimistic because of the continued growth in requests and same-base transports adjusted for weather cancellations, continued interest in hospital-based conversions, opportunities for future acquisitions, a strong balance sheet and solid cash flow as evidenced by the 7-percent growth in cash receipts per transport over the last 12 months and 45-percent growth in year-to-date cash from continuing operations.”

First- Half Results

For the quarter ended June 30, revenue was up 2 percent, to $263.6 million, from $257.6 million in the prior-year quarter. For the six-month period, revenue rose 5 percent, to $501.9 million, compared with $478.7 million in the prior-year six-month period. Also for the quarter, net income from continuing operations was down, to $27.4 million compared with $29.8 million in last year’s second quarter. For the six-month period, net income from continuing operations was also down, to $40.3 million from $41.4 million in the prior-year six-month period.

Community-based patient transports numbered 16,105 during the current-year quarter, compared with 14,994 in the prior-year quarter, a 7-percent increase. Patients transported for community bases in operation longer than one year (same-base transports) declined by 2 percent, or 318 transports, while weather cancellations for these same bases were up by 1,250 transports compared with the prior-year quarter.

Requests for community-based service climbed 4 percent for bases open longer than one year. Net revenue per community-based transport fell less than 1 percent, to $11,298 in the current-year quarter from $11,353 in the same period last year.

Helicopter tourism revenue gained 10 percent for the quarter and 12 percent for the half.

Maintenance expense, excluding tourism operations, was up $2.1 million, or 10 percent, compared with the prior-year quarter, even though total flight volume fell 1 percent. Excluding tourism operations, fuel expense retreated $1.9 million compared with the prior-year quarter, while fuel expense per flight hour was down by 32 percent.

Concurrent with the release of its most recent financial results, Air Methods said it is promoting CFO Trent Carman to “other roles within the organization” as part of its “long-range succession plan” and authorizing a $200 million stock buyback plan.

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Russia’s Rostec denies major impact from U.S., EU sanctions

by Vladimir Karnozov

Sanctions the U.S. and European Union imposed against Russia for its annexation of Crimea and support of separatists in Ukraine have not significantly eroded Rostec’s share of the global aerospace market, the head of Russia’s largest government-controlled corporation said.

“Despite the pressure of foreign sanctions, the corporation has managed to strengthen business relationships with Western partners, and so to prove once again that for us, business stays out of politics,” said Rostec general director Sergei Chemezov.

Chemezov was speaking at a recent press briefing to summarize the group’s financial results for 2014. He would not comment on the status of Rostec’s plans to partner to build the Q400 regional airliner with Bombardier. Last October, the Canadian manufacturer said that the plans were on hold because of the difficulties caused by sanctions against Russia, including those imposed by the Canadian government.

Rostec controls more than 700 companies, most of which belong to 17 large holding structures. Statistics show that the corporation’s overall workforce declined to 443,000 last year from 475,000 employees in 2013. The company plans further cuts, all involving white-collar workers. It considers blue-collar workers and engineers in short supply.

During 2014 and the first half of this year, Rostec achieved some success in expanding its business with the U.S. by extending agreements for VSMPO-Avissia to supply titanium to Boeing until 2022 and for the UZGA plant to perform license production of the Bell 427. It reaffirmed an old plan for license production of industrial gas turbines with GE. Rostec-controlled AviaCapital-Service leases Boeing 737-800s and re-engines the re-engined 737 Max, deliveries of which are funded from titanium sales to Boeing.

“Throughout the past year, we continued with shipments of Mi-17 helicopters to the U.S., and with aircraft components and construction materials to Airbus and Boeing. Sanctions only make us more active in the search for new markets and market niches,” declared Vasily Brovko, chief of communications and information.

More Cooperation Planned

The company managed to initiate just one new partnership with a European company, adding the AW169 to the list of products for the Helivert joint venture between Rostec member company Russian Helicopters and AgustaWestland.

“Our European partners say they are not interested in the sanctions regime to stay long,” Rostec said in a statement. “Those who came to see us recently insisted they want all our cooperation projects to continue, and these do continue. We have had such talks with Finmeccanica, AgustaWestland, Renault-Nissan, Daimler, Snecma, Thales, Sagem and others with whom we are involved in projects that are up and running. We, too, hope that our joint work will continue. The majority of our European partners speak very negatively of what is going on in the sphere of politics. ‘The fact is that Russia has always sold little to Europe,’ the statement continued. ‘We have been more active in establishing joint ventures with European companies and in buying technologies from them. At the same time, we have been exporting to third countries in the developing world. Besides, there has been a considerable amount of export into the United States because there are some distinct big markets there.’

Rostec had planned a massive initial public offering (IPO) for its member companies, but the recent change in relations with the West made the corporation reconsider its plans. The thinking behind its strategy seems to center on keeping foreign partnerships alive until the sanctions lift.

Will Invest in IT

Rostec plans to invest more in information technology, rare metals and other areas, “so as to be competitive and a strong leader,” Brovko said. Last year, the company invested 101.4 billion rubles in various programs. “We want to attract more foreign investors who would not just bring their money into Russia, but also share with us their managerial expertise and technologies,” he said. “As such, sales and IPOs are not so important. That is why we are now more inclined to consider joint ventures on the base of Russian high-tech companies.”

On July 27 Rostec announced that it will reduce its central office staff as part of a “comprehensive optimization program” to adopt corporate best practices. The company will cut the central staff by 28 percent, to 424 workers over the following two months, and to 316 workers by year-end.

Chemezov said the job reductions “should make the process of taking managerial decisions even more transparent and understandable, [improving] the competitiveness of the corporation.” A close friend of Russian President Vladimir Putin, Chemezov has headed the company since its founding in 2007. He said Rostec’s long-term strategic goal remains to promote the development of Russian industry, especially the machinery and high-tech sectors.

Days before that announcement, Rostec presented its annual financial report during a press event in Moscow. The 2014 report revealed that Rostec’s annual income grew by less than one percent from the previous year, reflecting the effect of U.S. and EU sanctions. Consolidated revenue totaled 964.5 billion rubles ($16.9 billion).

Thanks in large part to an increase of more than 60 percent in state defense orders, however, Rostec stayed profitable. It reported net profit of 33.9 billion rubles ($570 million), down from 40 billion rubles in 2013. Consolidated debt totaled 600 billion rubles, 30 billion rubles below the level in 2009, when Rostec received the largest majority of its assets from the Russian government. Roman Denisikin, chief of strategy, told AIN that he does not consider the debt load a problem, since “the debt burden is relatively small judging by international standards for structures such as ours.”

Rostec plans to implement its new growth strategy by year-end. It now considers the current strategy, which the company adopted in 2011, outdated because the economic environment has changed. “We need more effective action,” Brovko said. “The new strategy is being shaped, its main principles have already been formulated.” It calls for Rostec to increase its revenue three times faster than Russia’s GDF, which economists expect to increase by 2.5 percent next year after declining this year.
**MRJ engineering center opens ahead of impending first flight**

by Nigel Moll

Mitsubishi Aircraft formally opened its Seattle Engineering Center (SEC) on August 3 in Washington State. Established in collaboration with locally based AeroTec, the facility will administer the certification flight-test program for the Mitsubishi Regional Jet (MRJ), which Mitsubishi expects to fly for the first time this month or next. The first aircraft was rolled out in Japan last October and it logged its first engine run this past January. It has since been engaged in taxiing tests. Plans call for the first of four MRJ90 prototypes to arrive in the U.S. in the second quarter next year to begin a flight-test campaign scheduled to take place at Grant County International Airport at Moses Lake, about 180 miles east-southeast of Seattle. The Japanese company said it chose to do all certification flight-testing in Washington not just for its weather and airspace availability but also for the expertise of its workforce in the intricacies of jetliner certification. Mitsubishi Aircraft fell foul of those paperwork intricacies early in the MRJ program, setting back the development schedule by a couple of years, and it recognized it could not risk similar mistakes with the certification flight-test effort.

The MRJ will be certified first by Japan's civil aviation authority—in 2017, Mitsubishi expects—and then by the FAA. AeroTec envisions employing 100 people at the SEC, alongside 50 engineers deployed from Mitsubishi Aircraft in Nagoya. Mitsubishi Aircraft and AeroTec shook hands on the collaboration only this past January. The OEM sees the U.S. as the most important market for the airplane. Of the 223 aircraft now secured by firm orders, 170 are for U.S. regional airlines (Trans-States, 50; SkyWest, 100; and Eastern, 20). Including options and other purchase rights, Mitsubishi holds signatures for 407 aircraft. Mitsubishi Aircraft president Hiromichi Morimoto told AIN that the company had hoped to reach this sales level when it launched the program in 2008. “We hoped to have orders and options for between 400 and 500 aircraft by the time we made the first flight,” he said.

The opening ceremony last month, held at the Museum of Flight on Boeing Field, was attended by about 200 guests, among them Washington Governor Jay Inslee; Masahiro Omura, Consul General of Japan in Seattle; and Lee Human, president of AeroTec (Aerospace Testing and Engineering & Certification). In attendance from Mitsubishi Aircraft were president Morimoto and Kenichiro Honda, v-p of the Seattle Engineering Center. Masahiko Ariraha, chairperson of Mitsubishi Heavy Industries America, was also present.

The current configuration of the MRJ has its roots in smaller aircraft. A source close to the program told AIN that the airplane as first conceived was to be a 35-seater powered by Rolls-Royce BR700-series turbofans but later was frozen at 50 seats with GE CF34s for power. The design was essentially frozen when Pratt & Whitney mounted an intense effort to persuade Mitsubishi to adopt its geared turbofan. Despite Mitsubishi’s insistence that the program was too far along to change engines, Pratt persisted and eventually prevailed, signing the MRJ in its current configurations (the 76-seat MRJ170 and 88-seat MRJ90) as the launch application for the PW1200G variant of the new engine. Mitsubishi predicts the MRJ will reduce the airport noise area of the Embraer E190 by 40 percent and beat its CO₂ emissions by 20 percent.

In AeroTec, Mitsubishi has a partner founded in 2003 by president Human. Before he launched AeroTec, Human was flight-test manager at Aviation Partners Boeing, and before that an engineer with Aircraft Engineering Specialists. Among the projects on which he has worked are the Aviation Partners blinded windigs for the 737, 737-900 and various business jets, the 737-300 that served as the avionics testbed for the F-35, and the Beechcraft King Air 250.

Construction of AeroTec’s 65,000-sq-ft hangar at Moses Lake in the desert east of Seattle was almost complete last month. At 87 feet high in the center of the doors, it is sized to accommodate a Boeing 777X and will comfortably house the MRJ test fleet. Data collected by the four flight-test aircraft will be analyzed at the engineering center in the Georgetown section of South Seattle. Mitsubishi and AeroTec chose Moses Lake (elevation 1,189 feet msl) for its runways (four of them, the longest 13,503 feet) and its desert climate, which combine to ensure high-frequency flight-test operations. Some runway performance testing will be performed at Roswell International Air Center, N.M., and high-altitude takeoffs and landings proving trials will be conducted on 9,400-foot-long Runway 6/24 at Gunnison-Crested Butte Regional Airport, Colo., elevation 7,680 feet msl. Extreme environmental testing will take place in the McKinley Climatic Laboratory in Florida.

**Aviation silk road to promote open skies in Central Asia**

by Neelam Mathews

The United Nations World Tourism Organization (UNWTO) plans a scaled-up aviation Silk Road initiative for the integration of Central Asia and surrounding regions into a cohesive trading belt. The aviation route at first will include northern, northwest and central China, Kyrgyzstan, Turkmenistan, Kazakhstan, Uzbekistan, Mongolia, Azerbaijan, eastern parts of Turkey, southwest Russia, Armenia and Georgia.

The Silk Road or Silk Route— an ancient network of trade routes used by merchants and pilgrims that connected the West and East from China and India to the Mediterranean Sea—inspired the same name for the aviation initiative to promote open skies in the region. “Embracing open skies is vital for the region if the concept [is] to be successful,” said Alia Peressotta, head of the Silk Route program of the UNWTO. “Building a cohesive brand of the Silk Route is important.” The “brand,” as she called it, includes best practices to encourage openness through the modernization of visa procedures and enhancing connectivity through greater collaboration amongst airports, airlines and aviation ministries,” she said during the Routes Silk Road conference held in Tbilisi, Georgia, in July.

Also, a monopoly in aviation services in major countries of the Silk Route means open skies for the region as a whole “does not seem feasible,” Yolanta Strikitsa, director of London-based Strikitsa Consulting, told AIN. “Yes, it could apply to a few countries to start with,” she added. “[Competition would] make the life of local airlines difficult, but it could improve airport business of the region. A flight is not yet a commodity; it is a luxury as demand exceeds supply. Therefore, a market that demands more operations and more routes can pay higher fares imposed by local carriers.” Once middle classes grow, partnerships will be more likely and changes in strategy seen, she predicted.

Change of another kind has come with Georgia’s inclusion last year as a member of Eurocontrol, the European Organization for Safety of Air Navigation. Eurocontrol is now offering its expertise to establish air traffic management guidelines for Georgia’s Civil Aviation Authority (CAA). “Some of the EU regulations are tough for our local carriers. But now the draft is ready and will be presented to the parliament on December 1 for approval,” Igor Aptsiauri, first deputy director of Georgia’s CAA, told AIN.

Meanwhile, regional carriers such as Kazakhstan’s Air Astana have already begun to play a role in the Silk Route. Holding a 30-percent market share, Air Astana dominates air transport in Central Asia. The next largest carrier, Uzbekistan Airways, controls 15 percent of the traffic, followed by Kazakh Scat Airlines, which holds around 8 percent. Eight other regional carriers hold the rest. Air Astana’s passenger numbers grew by 4 percent, to 1.82 million, in the first half of this year over the same period of the previous year. It holds an order for seven Airbus A320-series Neos, including four long-range A321s, scheduled for delivery starting next year.

OEMs project a positive outlook for the region over the next 20 years. Boeing has forecast a demand for 1,150 new aircraft, of which it expects single-aisle airplanes to account for 66 percent and regional jets to account for 17 percent.

[Image 395x743 to 751x1000]

PHOTOS: NIGEL MOLL

[AeroTec’s 65,000-sq-ft hangar at Moses Lake, above, will house the MRJ flight-test fleet, beginning early next year. A right, l to r, Nobuo Kishi, Mitsubishi Aircraft senior executive v-p; Kenichiro Honda, Mitsubishi Aircraft v-p of Seattle Engineering Center; and Lee Human, founder and president of AeroTec, open Mitsubishi’s new engineering center in South Seattle.]

[Image 579x599 to 751x739]

PHOTOS: NIGEL MOLL

[At 87 feet high in the center of the doors, it is sized to accommodate a Boeing 777X and will comfortably house the MRJ test fleet. Data collected by the four flight-test aircraft will be analyzed at the engineering center in the Georgetown section of South Seattle. Mitsubishi and AeroTec chose Moses Lake (elevation 1,189 feet msl) for its runways (four of them, the longest 13,503 feet) and its desert climate, which combine to ensure high-frequency flight-test operations. Some runway performance testing will be performed at Roswell International Air Center, N.M., and high-altitude takeoffs and landings proving trials will be conducted on 9,400-foot-long Runway 6/24 at Gunnison-Crested Butte Regional Airport, Colo., elevation 7,680 feet msl. Extreme environmental testing will take place in the McKinley Climatic Laboratory in Florida.]

www.ainonline.com • September 2015 • Aviation International News 67
BELL HELICOPTER SINGAPORE ADDS MX FOR AUSSIE OPERATORS

Bell Helicopter’s Singapore Service Center has received approval from the Civil Aviation Safety Authority (CASA) of Australia to perform maintenance and customization on all Bell 412s registered Down Under. “Customer demand for Bell helicopters and service offerings in the Asia-Pacific region is rapidly increasing, and we are taking steps to ensure our customers have access to what they need, when they need it,” said Michael Reagan, director of global services at Bell Helicopter. “Over the past few years, the Bell Helicopter team has been laser-focused on obtaining certifications and approvals around the globe that will provide our customers with even more offerings.” This approval adds to recent authorization for the Bell Helicopter Service Center in Singapore to perform inspection, testing, repair and modification for current-production Bell helicopters under the regulatory authorities of Singapore, Thailand, Indonesia and the Philippines.

FLIGHTSAFETY OK’D TO PROVIDE ROLLS-ROYCE BR725 MX TRAINING

Rolls-Royce appointed FlightSafety International an authorized training provider for BR725 engine and troubleshooting courses. The training will be offered at FlightSafety’s maintenance training center in Savannah, Ga., to technicians who work on the Gulfstream G650, which is powered by the turbofan. The line maintenance and borescope inspection courses will provide hands-on practical training using a BR725. Maintenance technicians will receive a comprehensive description of the engine and training on borescope inspections and the removal and reinstallation of line-replaceable units. The courses will also cover engine and engine-systems servicing, routine maintenance and inspection, as well as safety warnings and precautions. Rolls-Royce and FlightSafety are also developing an enhanced troubleshooting course for the BR725. Rolls-Royce customers enrolled in CorporateCare will be able to use their annual Rolls-Royce training voucher for this course once it becomes available.

GULFSTREAM EXPANDS FACILITY AT BRUNSWICK, GEORGIA

Gulfstream Aerospace expanded its Brunswick, Ga. service center with the opening of a newly constructed 110,000-sq-ft (9,290 sq m) hangar at Brunswick Golden Isles Airport. The expansion, announced in January last year, has created 60 new jobs at the site, with 40 more positions anticipated by year-end. The new building, which complements an adjacent company-owned maintenance facility and completion center, accommodates all Gulfstream models and more than doubles the site’s under-roof capacity from a mixture of seven large-cabin aircraft to as many as 16. Brunswick’s new hangar also has two overhead cranes and a tail dock. Meanwhile, Gulfstream announced that it is providing maintenance, repair and overhaul services at Teterboro (N.J.) Airport through sister company Jet Aviation’s facility there. Gulfstream now has 11 technicians, along with support personnel, in Teterboro. The technicians are allowed to work under an FAA repair station authorization and will be managed by Gulfstream’s company-owned service center in Westfield, Mass.

BANYAN AIR SERVICE EXTENDS OPERATING HOURS FOR MX

Fort Lauderdale (Fla.) Executive Airport-based Banyan Air Service expanded its maintenance operations by adding a second shift, seven days a week. The new hours of operation are Monday through Friday from 8 a.m. until midnight and on Saturday and Sunday from 8 a.m. until 6:30 p.m. Banyan Air Service currently has 44 maintenance technicians and support staff and is recruiting for more. The company offers airframe and avionics maintenance for most brands of turbine-powered business aircraft. Banyan Air Service is factory authorized as a service center for Beechcraft, Honda Aircraft, Piaggio and Quest. Along with its FAA repair station and EASA repair station certificates, Banyan Air Service holds certificates in several island nations and Latin American countries. It has a mobile maintenance unit to support customers throughout Central and South Florida.

ASSOCIATED AIR CENTER OK’D AS ANAC 145 REPAIR STATION

Associated Air Center obtained Part 145 repair station certification from the Brazilian Civil Aviation Authority, ANAC. The certification will allow Associated to maintain, repair and modify Brazil-registered private aircraft and return them to service. It also allows interior completions, scheduled maintenance, cabin refurbishment and cabin system upgrades performed at the Part 145 FAA repair station in the company’s Dallas Love Field location. “Our ANAC certification will provide operators of Brazilian-registered aircraft with more options outside their country,” said AAC president James Colleary. “We are already pursuing completions projects for multiple Brazilian customers.” The MRO holds an FAA organization designation authorization.

GLOBAL JET SERVICES OFFERS TRAINING ON PHENOM 300

Global Jet Services has added the Phenom 300 to its training offerings for Embraer aircraft. The two-week initial-level maintenance-training course covers all applicable ATA chapters, addressing Phenom 300 systems theory, operation, inspection and servicing. The course includes hands-on sessions for participants to gain a practical understanding of aircraft systems and examines LRU troubleshooting from a theoretical and functional perspective, the company said. Courseware provides for either traditional paperbound student manuals and workbooks or tablet-based mobile technology. The latter offers portability to aid troubleshooting along with search and navigational features to locate reference material rapidly, according to Global Jet. The company also offers line and refresher courses.

DUNCAN AVIATION HOUSTON EARN MEXICAN CERTIFICATION

Duncan Aviation’s Houston satellite avionics facility recently received authorized service center approval from the DGAC, Mexico’s civil aviation authority. The authorization allows the facility to conduct avionics repair and installation on aircraft registered in Mexico. Located at Wilson Air Center at Hobby Airport in Houston, the Duncan satellite facility employs 15 and is dedicated exclusively to avionics repair and installation. The facility has technicians on call 24 hours a day. “This location is particularly useful to our Mexican-registered aircraft customers because of its proximity to that country,” Mark Cote, Duncan’s v-p of satellites, parts and rotatable sales, avionics and accessories, told AIN.

CONSTANT AVIATION EXPANDS AOG OPERATIONS

Cleveland, Ohio-based Constant Aviation has added a team at Orlando, Fla., to the list of cities in its AOG support network. “Since the launch of our AOG mobile response teams, we have seen more customer requests to road-trip to AOGs. When we were looking at another possible airport at which to base our AOG team, we realized that the Southeast region was an area that needed additional support,” said Kevin Dillon, v-p for AOG operations. Constant’s Birmingham, Ala.-based AOG team is responsible for the bulk of the Southeast calls, and the company expects the new location and additional team members will allow for better and quicker coverage throughout the region. Constant Aviation also has AOG teams based in Cleveland and Las Vegas. Down the road, “We are looking to have a team based in the Northeast as well as additional support in the Southwest,” Dillon said.

VECTOR LAUNCHES JT15D VMAX PROGRAM

Vector Aerospace has launched the Vmax support program for the Pratt & Whitney Canada JT15D turbofan. It combines the MRO’s JT15D designated overhaul facility and field service team with a pay-per-hour engine service plan. Owners of engines enrolled in Vmax receive worldwide...
coverage through a dedicated 24/7 customer-support line and regular monthly hours reporting.

Some 5,250 JT15Ds are in service, mostly on the Citation I/II/IV/Ultra and the Beechjet 400/400XP.

Vector has also extended its designated overhaul facility license for the engine by a further 10 years to 2032 to ensure long-term support for Vmax customers. Vector is a designated overhaul facility for the PW100, PW150 and PW300 and distributor and designated overhaul facility status for the PT6A and PT6T.

ONTIC SIGNS DEAL WITH AFRICAN EXECUTIVE AVIATION

African Executive Aviation has entered into an agreement to represent UK-based Ontic in Africa. “Our agreement with [Ontic] positions us for growth within our aftermarket distribution services division across the African continent with access to some 4,000 assemblies, including APU, ECU, starters and generators and oxygen systems,” said Peter Bouwer, African Executive’s managing director.

“We are excited about the opportunity Africa brings to our operations both in Cheltenham and at our Chatsworth [Calif.] facility in the USA,” said Gareth Hall, Ontic’s president and managing director. Ontic says it can evaluate, acquire and transition a product line or business with minimal burden on the licensor or its customers.

FL TECHNICS JETS REBRANDS AS JET MAINTENANCE SOLUTIONS

FL Technics Jets is rebranding as Jet Maintenance Solutions (Jet MS). The EASA Part 145 company provides MRO services for business and regional aircraft. Darius Saluga, CEO of the Vilnius, Lithuania-based company, said he believes that the new name will communicate a stronger message about its core activity: maintenance and repair of business jets and regional airliners.

“The renewed brand will help us enter new markets, as well as promote new MRO products. This includes support for the Challenger 300, Embraer Legacy and other types that we are planning to add under our five-year development plan,” said Saluga.

Jet MS offers line and base maintenance for the Hawker 700/750/800/800XP/850XP and Bombardier CRJ100/200/440 and Challenger 604/605/850.

The company also provides cabin refurbishment and modification, engine management, aircraft cleaning, aviation oil and fuel supply, express parts delivery and role conversions for other business and regional jets. Jet MS is a Rockwell Collins-authorized dealer and offers warranty support for Tronair ground support equipment.

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Routine deviations from manual have major safety consequences

The just-released accident report on the Airbus A319 that lost both doors on one engine’s fan cowl on takeoff from London Heathrow Airport in May 2013 is a must-read for anyone involved in aviation safety, whether at a major airline or manufacturer, at an air taxi or just flying or maintaining GA aircraft. The issues raised by the events leading to the accident, and as the events were unfolding in the airplane, affect many areas of aviation—from aircraft design to maintenance to preflight inspections to communications between cabin and flight crew during an in-flight emergency.

But the most significant aspect of the report relates to maintenance and maintenance human factors. After all, it was maintenance errors that precipitated the accident. The A319 was substantially damaged and the crew had to make an emergency landing, which they accomplished with no injuries. The accident report details not only the obvious failures to comply with maintenance manual procedures but also less obvious contributing factors that left the cowling doors unlatched, including the mechanics’ schedules and likely effects of fatigue. The report also highlights impediments to discovering the open doors during the preflight inspections by the crew and ground personnel. In addition, it makes recommendations for, among other things, changing the design of fan cowl door latches to prevent a recurrence.

Human Factors

One of the real highlights of the report is the Human Factors Specialist’s Report, which focuses on the “human factors issues that influenced the performance of the maintenance technicians” the night the aircraft was left unsafe for flight the next morning and its log improperly signed off for work that had not been completed.

The human factors report raises a number of issues that have long concerned many of us in maintenance. I hope that seeing these flaws analyzed in the context of such a potentially catastrophic accident will force the FAA, the airlines and others involved in maintenance to spend time and resources working through them.

One of the most significant issues for me is how seemingly minor deviations from the maintenance manual can—in all the wrong circumstances—lead to an accident. In this case, the mechanics intentionally did not close and latch the fan cowl doors or leave them in a clearly open position, even though the maintenance manual required them to. The reasons for not doing so are common: the procedures are cumbersome to follow and the mechanics were going to return to complete the work they had begun but needed to get the appropriate tool. In addition, they substituted their own judgment about the best way to leave the doors unlatched instead of following the manual’s directions. Among the “small” items skipped that could have prevented this near tragedy was the placement of a required warning notice in the cockpit to alert the crew or other mechanics that the cowling doors were open. The human factors report calls these “routine” violations because they “are a common occurrence amongst many operators.”

The mechanics did, in fact, return to complete the work, but markings on the ramp and placement of the logbook caused them to return to the wrong aircraft. While technicians knew of other instances of work being done on the wrong aircraft, management seemed unaware of the problem.

This mishap demonstrates why maintenance culture has to change so that deviations from manual requirements—no matter how small—are not tolerated. At the same time, problems identified by mechanics in maintenance-manual procedures or in routine maintenance operations have to be flagged and addressed immediately, backed by a commitment from the executive suite all the way to the shop floor.

While I am not familiar with the maintenance culture at this particular base, all too often I have seen managers and executives “winking” at procedural deviations in the interests of moving work more “efficiently.” Management needs to have a presence on the shop floor and routinely audit work to ensure that detailed work steps are followed every time. Complying with detailed maintenance manual requirements takes time. So while I believe mechanics need to take responsibility for complying with each detailed step every time maintenance is performed, they need management that supports them by allowing them time to attend to all the details required to do a job correctly.

The opinions expressed in this column are those of the author and not necessarily endorsed by AIN.
GAO urges FAA to boost repair station oversight

More than 400 FAA-certified repair stations in Europe perform work on U.S.-registered aircraft and components. To avoid duplicative oversight, the U.S. and the European Union (EU) signed an aviation safety agreement on May 1, 2011, to permit foreign authority safety inspectors to inspect EU repair stations on behalf of the FAA.

While the FAA met the agreement’s deadline to transfer its oversight responsibilities to foreign aviation authorities, it did so without ensuring that the authorities were fully prepared to accept their new roles, according to a report issued by the U.S. DOT Office of the Inspector General.

In addition, the watchdog agency noted, the FAA did not follow its own processes to assess foreign authority capabilities or ensure that these authorities completed their initial training on the agreement before the transfer. Training, procedural and data weaknesses further hinder the FAA’s ability to monitor EU repair stations.

The FAA did not train its inspectors on how to conduct inspections on foreign authorities or provide them with written guidance on how to complete new inspection forms, leading to inaccurate reporting and insufficient information needed to ensure that FAA standards are being met.

Sarah MacLeod, executive director of the Aeronautical Repair Station Association, told AIN. “The OIG [Office of Inspector General] and the Government Accountability Office [GAO] have both commented on inspector training issues; indeed, the CRI ARC [Consistency of Regulatory Interpretation Aviation Rulemaking Committee] referenced the same problem. The fact that the OIG points it out again as a basis for its conclusion that the assessments and the oversight are inadequate is rather ironic. This is not the first time the OIG provided incomplete information to the public.

“The whole point of the bilateral agreement is to accept the oversight of the foreign government and focus attention on the differences between the regulatory requirements of cooperating countries. All regulatory authorities have issues with oversight capabilities. The OIG has brought lack of assessment, training and resource issues to the FAA’s attention multiple times; it is not surprising that the OIG found those issues with foreign authorities.” – D.A.L.

News Note

Pilots and passengers can now access Satcom Direct’s GlobalVT voice and texting app via Android mobile devices. The app, previously available only for iOS devices, allows users to make voice calls and send and receive text messages anywhere in the world via the Satcom Direct Router, while using the same phone number they already use with their mobile phone. According to Satcom Direct, it developed a special voice codec (encoder-decoder) to work well with satellite calls.

The Satcom Direct router works with all current satcom systems, including Ku- and L-band and the upcoming high-speed Ka-band, which begins service this year. Installation STCs “are available for most major airframes,” the company said. “Satcom Direct is the first to enable Android users to make and receive calls and texts in the air, worldwide, with their own number,” said founder and CEO Jim Jensen.

E² = Exceeding Expectations In Performance Upgrades

“From pre-purchase evaluation to a Garmin G1000® installation, Stevens is our King Air specialist.”

“Even though we have 75 techs who work exclusively on our helicopter fleet, we went to Stevens for their expertise with the King Air. They are fast, efficient and totally dependable. We have relied on them for everything—from pre-purchase evaluation four years ago and ongoing maintenance to installing a new interior, winglets, Blackhawk engines and new props, additional FM radios and, most recently, the Garmin G1000®.”

State-of-the-art performance upgrades for jets and turboprops—in propulsion, avionics, interior design and exterior airframe modification—are a Stevens Aviation tradition. We continually exceed our customers’ expectations by providing diversified expertise in aircraft maintenance, modification and refurbishment, aircraft sales, aircraft management, flight services, and fixed base operations. You’ll find our facilities in Greenville SC (GYH), Greer SC (GSP), Dayton OH (DAY) and Nashville TN (BNA). For more information, contact Phil Stearns, Sales Manager, at 937-470-1851 or pstein11@StevensAviation.com.
San Antonio FBOs Consolidate, Rebrand as GAT ONE

Imperial Aviation has purchased the former San Antonio Aviation and Stinson Jet Center FBOs at San Antonio’s Stinson Municipal Airport and combined their operations into one location renamed GateOne Stinson.

Signature’s Revenue Slides 13 Percent

Signature’s revenue slid 13 percent, and general aviation movements have outperformed against the markets “are driven by acquisitions,” said John Langevin, Jet Aviation’s vice president of FBO operations in North America. “This new FBO is designed to accommodate the needs of our customers, and the expanded amenities enable us to do so well into the future.” Staff is expected to increase by six to 10 employees. This undertaking is the first comprehensive expansion of the FBO in the more than 30 years it has been at Hanscom.

Jet Aviation Breaks Ground on Upgraded Boston-Area FBO

Jet Aviation has broken ground on a major renovation of its FBO at Hanscom Field in Bedford, Mass. The improvements will provide more hangar and ramp capacity, home operational safety and efficiency and achieve Leed Silver green-building certification, the company said. When completed in the third quarter of next year, the facility will consist of a two-story 13,000-sq-ft terminal, a 40,000-sq-ft of office/shop space. Plans also call for a 92,000-sq-ft ramp upgrade. “We are delighted to be under way with construction and enhancements to our Boston/Bedford facility,” said John Langevin, Jet Aviation’s vice president of FBO operations in North America. “This new FBO is designed to accommodate the needs of our customers, and the expanded amenities enable us to do so well into the future.” Staff is expected to increase by six to 10 employees. This undertaking is the first comprehensive expansion of the FBO in the more than 30 years it has been at Hanscom.

UPSTATE NEW YORK AIRPORT INAUGURATES FBO FACILITY

New York’s Jefferson County has opened a brand-new FBO at Watertown International Airport. The $3.5 million facility, which was paid for by the county and state development grants, features a 4,800-sq-ft terminal that houses passenger and pilot lounges, a 30-seat A/V-equipped conference room, onsite car rental, flight-planning room and shuttle service. The 19,000-sq-ft heated hangar can accommodate the latest long-range business jets. The Phillips 66-branded facility is open from 6 a.m. to 8 p.m. with after-hours call-out available. Located near the Canadian border, the airport offers on-demand U.S. Customs clearance.

A current FAA-grant-funded runway expansion project expected to be completed in next year’s second quarter will extend the primary runway (10/28) to 7,000 feet from 6,000.

Voyager Jet Opens FBO at Allegheny County Airport

Upscale accommodations, convenient 24/7/365 quick-turn capability and proximity to downtown are hallmarks of the significantly upgraded Voyager Jet Center facility that recently opened at Allegheny County Airport near Pittsburgh, Pa. The FBO offers an 8,500-sq-ft passenger terminal, as well as a large pilot lounge and crew rest facilities, conference room and flight-planning center. Passengers can also take advantage of curbside and planeside valet service and on-ramp Wi-Fi availability, with the facility’s heated 18,000-sq-ft hangar offering enough space to house a G650.

Located at the west end of the airfield, the revamped Astra-branded FBO also features around-the-clock charter service and enhanced security measures. A formal grand opening for the new facility took place last month with a cocktail reception held alongside business aircraft on display from Bombardier Learjet, Cessna and Gulfstream. Allegheny County Airport is the primary general aviation reliever field for Pittsburgh International Airport and is located eight miles from downtown.

Sheltair Boosts Its Buying Power

Aviation real estate company Sheltair, which operates FBOs in New York, Florida and Georgia and manages more than three million square feet of aviation properties, secured a $260 million credit facility with SunTrust Bank in July. According to the privately held company, the proceeds will be used for continued expansion of its 16 bases and to fund future acquisitions and alliances. “This is a significant accomplishment for our company,” noted Sheltair CEO Jerry Holland. “The facility provides the financial resources under the optimal structure necessary to pursue our strategic plans for our growing network of bases.”

FBO ONE SOFTWARE CHOSEN BY AFRICAN FLIGHT SERVICES FIRM

Flight-support provider Astra Aviation Services recently signed an agreement with Amsterdam Software for use of its FBO One online management and logistics system. Introduced in 2008 and originally intended for business aviation operations, FBO One streamlines...
A renovation of its departure lounge at Shannon is one of several changes Universal Aviation recently implemented at the Irish airport.

**Epic Expands Postings of International Fuel Price**

International fuel supplier Epic Aviation has partnered with UAS International Trip Support to make its most current fuel prices for more than 200 countries available through industry pricing service Fuelerlinx. According to the fuel company, all current Epic Card customers will now see up-to-date international fuel pricing automatically added to their Fuelerlinx accounts, along with access to preferred pricing and no additional transaction fees.

The Oregon-based company also announced that its Epic card is now accepted at six new locations in the U.S.: Landmark Aviation at Seattle’s Boeing Field/King County International Airport, Jet Center at Santa Fe Municipal Airport in New Mexico, Million Air at Arizona’s Tucson International Airport, Gwinnett Aero at Georgia’s Gwinnett County Airport and at Starport at Orlando Sanford International Airport and Pensacola Aviation at Pensacola International Airport, both in Florida.

**Irish FBO Gets Makeover**

Universal Aviation has completed an overhaul of its FBO at Ireland’s Shannon Airport, which it has operated since 2003. Customer feedback shaped the renovation of the facility’s approximately 600-sq-ft departure lounge and its crew lounge, kitchen and operations offices. Shannon is the only European or Gulf-region airport to offer U.S. Customs and Border Protection pre-clearance, allowing private aircraft to proceed directly to their destination in the U.S., and as such it sees a large amount of business aviation traffic.

“Shannon is known for being an excellent tech stop but it is also an increasingly popular destination,” noted Sean Rafferty, managing director Universal Aviation UK and Ireland. “This renovation is just the latest in our ongoing commitment and investment to enhancing our clients’ experience at strategically important locations throughout Europe and the rest of the world, whether through full ground-handling facilities or highly customized supervisory services.”

**Ideal Aviation Latest FBO to Join Paragon Network**

Longtime St. Louis Downtown Airport service provider Ideal Aviation became the latest facility to join the Paragon Network of independent FBOs. Ideal Aviation, which formally joined August 1, is the 22nd FBO in the Paragon Network spanning across the continental U.S., the Bahamas and Puerto Rico. The Paragon Network is part of the Paragon Aviation Group.

Located five minutes from the St. Louis Arch, Ideal Aviation's recently renovated facility offers heated hangar space, GPU service and wireless Internet coverage. Passengers and crew can also take advantage of concierge services, a conference room and a restaurant and catering (including “world famous BBQ,” befitting its location).

**Redmond City Council OKs Two FBOs at Roberts Field**

The Redmond, Ore. city council recently approved the operation of an FBO at Roberts Field Airport, the second such authorization it provided in a span of two weeks. Butler Aircraft Services, which has had a presence at Roberts since the 1940s, received council approval—by unanimous vote—to continue providing FBO services under a five-year new sublease from KC Aero.

For more than a year, Butler and the airport authority had been locked in a dispute about recently instituted minimum operating standards. Butler had been the lone service provider on the field since 2010, when it bought out Redmond Air and moved into its facility. The company currently occupies approximately four acres on the airport and has a 6,600-sq-ft terminal with an attached 4,000-sq-ft Part 145 repair station and an 18,000-sq-ft hangar, big enough for a Falcon 900.

Earlier, the city council voted unanimously to allow Oregon-based Leading Edge Aviation to establish a new FBO at Roberts Field. Leading Edge was expected to begin operations by early last month from the refurbished former Butler Aircraft Services terminal.

**Airline-Owned FBO Makes Name for Itself in Cincinnati**

While commercial aviation and private aviation often find themselves at odds, at Cincinnati/Northern Kentucky International Airport (CVG) they form a kind of synergy in the form of the Delta Jet Center, the lone aviation services provider on the field. Yes, that Delta, the oldest continually operating airline in the U.S. The company acquired the then newly built, four-and-a-half-acre FBO and a private jet charter operation when it completed its purchase of Comair in 1999, and has been operating it ever since. For most of its existence, the location was viewed largely by the parent company as a part of the Delta Private Jets infrastructure, a base of operations for the charter fleet that happened to sell aviation fuel.

That notion has changed in the last year-and-a-half. “One of the biggest improvements we’ve done there is [the implementation of] a customer service culture,” noted James Murray, Delta Private Jets vice president of operations. “We’ve brought in some experience, both on the operation side and the customer service side, and we’ve changed how we view the FBO and the role that it fills for us. The biggest change is going to be the level of service that we’re providing and the focus that we put on delivering that service to our customers.”

**Customer Amenities**

During a three-month refurbishment of the 10,000-sq-ft two-story terminal last year, walls were removed to expand the lobby and create a discrete VIP area with an en suite bathroom and two small private conference rooms that can be closed off. The pilots’ lounge and snooze rooms were relocated upstairs, the building was painted and recarpeted and all the furniture was replaced.

Other amenities include an additional 12-seat conference room, concierge service, business center, flight-planning rooms, shower facilities, a kitchen with dishwashers, crew cars and rental cars. The FBO also has a customer-use agreement with a local gym and provides courtesy shuttle service there.

The 40,000-sq-foot heated hangar building—which can accommodate aircraft as large as the G650—is home to a Cessna CJ3, an Excel, a Learjet 60 and a TBM 700. It also houses the FBO’s rapidly expanding Part 145 repair station, which takes up approximately half of the 34,000 sq ft of aircraft storage space, allowing little space for additional based aircraft or transient guests. The company is working to obtain another building to relocate its maintenance operation. The MRO facility provides airframe repair and can perform heavy checks. It handles much of the maintenance on the company’s charter fleet and is looking to expand into interior work.

During last year’s renovation, the hangar’s fire protection was upgraded to an infrared detection and foam-suppression system, and Wi-Fi service was extended to the hangar and the 150,000-sq-ft ramp, which can accommodate virtually any aircraft. In the past the FBO has hosted Air Force One and its supporting C-17s, guests is expected to see again as this election cycle begins to roll.
PRELIMINARY REPORTS

EMS HELICOPTER CRASH KILLS PILOT
Airbus AS350, near Frisco, Colo., July 3, 2015
The helicopter, being operated under Part 135 by Air Methods Helicopter, crashed near a fire around 10:51 a.m. The pilot was killed when the aircraft entered shallow water near a beach. The helicopter had been flying in visual conditions and was not using an automatic flight director. The NTSB spokesman reported the helicopter was seen rotating before impact, which ignited a fire that destroyed the aircraft. The weather was VMC.

DAUPHIN MISSING FOR TWO DAYS
Airbus AS365N, Tirap district, India, Aug. 4, 2015
All four occupants of the helicopter were found dead when the wreckage was discovered in an area of dense jungle two days after it went missing. The aircraft, operated by Pawan Hans Helicopter, was en route to Khoansa Arunachal in the Pradesh region. Weather reports indicated fog was expected along the route of flight.

CHALLENGER DAMAGED IN GROUND COLLISION
Bombardier Challenger 600-2B16, West Palm Beach, Fla., July 22, 2015
The business jet collided with a bull while taxiing for departure at 2:10 p.m. During a takeoff make-up, the aircraft hit the ground, rolling onto its right side. The India-based film crew was involved in a rollover accident. The aircraft was substantially damaged in a post-impact fire. Weather at the time of the incident was clear, with southerly wind at 27 knots and 30 percent low clouds.

FACTUAL REPORT

PILOT SHUT DOWN WRONG ENGINE

A380, near Songshan Airport, Taipei, Taiwan, July 2, 2015
The captain of the A380 mistakenly shut down the working engine of the aircraft after the auto-feather system had halted the number-two propeller, according to the report released by Taiwan’s Aviation Safety Council. The aircraft had departed Taipei Songshan Airport at 10:51 a.m., with another experienced captain sitting in the right seat. The crash killed 43 of the 58 people on board and injured two others on the ground. The report said that, climbing at 1,200 feet per minute, the crew received an ENG-2 FLAMEOUT AT TAKEOFF warning message. Five seconds after the initial warning, the captain flapped the landing gear as the number-one engine fell to idle, despite a warning to cross-check first from the other captain in the right seat. Fifteen seconds later the right-seat pilot asked for confirmation that the right engine had failed, but the pilot flying did not restore power on the number-one engine as the airspeed slowed to 101 knots. Four seconds later, the first stall warning and stick-shaker activation were recorded. For the next 20 seconds, the two pilots sounded confused about which engine had failed as the number-two power lever was first advanced and then quickly pulled back to idle. The flight recorder confirmed that the number-one condition lever was pulled back into cutoff. Approximately 40 seconds later, the pilot flying recognized the error and called for the number-one engine to be restarted. The left engine’s N1 speed, however, had reached only 30 percent by the time of impact.

HELCOPER CRASHED DURING TRAINING EXERCISE
Airbus A3308Z, Fort Worth, Texas, May 29, 2011
The pilot’s failure to maintain adequate airspeed and altitude during a simulated flight control failure caused the loss of control that precipitated this accident, according to the NTSB. Contributing to the accident was the flight instructor’s inadequate supervision and delayed remedial response. Minor injuries were reported to the two people on board, and the helicopter was substantially damaged in a post-impact fire. Weather at the time of the accident was clear, with southwesterly wind at 20 knots, gusting to 27.

THE RIGHT SEAT BEFORE OVERRUN

MD 369, Vega Baja, Puerto Rico, July 24, 2015
Neither the pilot nor the two passengers were injured when the helicopter entered shallow water at approximately 9:45 a.m. Visual weather conditions prevailed and no flight plan was filed before the Part 91 flight departed San Juan. Minutes later, the pilot noticed he was off the end of the runway and elected to attempt a hover and proceed to a bridge. The pilot attempted unsuccessfully to gain the attention of the ground handler, dismounted and stood near the front of the airplane trying to communicate to the right-seat pilot that the baggage door was open. The handlers boarded an ATV and drove out to the airplane, parking about 10 feet in front of the left wing. One of the ground handlers dismounted and stood near the front of the airplane trying to communicate to the right-seat pilot that the baggage door was open. The right-seat pilot stood up and proceeded into the cabin, after which the airplane began moving forward. The ground handler attempted unsuccessfully to gain the attention of the pilot in the left seat, and the left wing was substantially damaged when it struck the ATV. Subsequent inspection by maintenance personnel found no anomalies in either the hydraulic or braking system that would have prevented the aircraft from stopping.

JETPILOT OFFERED ENGINEER PICT THE RIGHT SEAT BEFORE OVERRUN
Cessna 525 Citation, Nashville, Tenn., June 15, 2011
The probable cause of the accident was the PIC’s failure to execute a go-around once the approach became unstable. The pilot-in-command, who was not a flight instructor, held a student pilot certificate and the opportunity to fly the aircraft from the right seat. During the go-around into John Tune Airport (JTN), the student kept the aircraft high and fast. The PIC resumed control of the aircraft but touched down long on the nose wheel to avoid running off the end of the hard surface, substantially damaging the aircraft.
The FAA is proposing to introduce a new acceptable means of compliance with the certification specifications related to supercooled large droplet (SLD) icing conditions which may be used by large turbine aircraft and engine manufacturers. To this end, this notice of proposed amendment enables the use of a means of compliance based on “comparative analysis.” Manufacturers could be given “credit from previously certified large airplane type designs having proved to safely operate in SLD icing conditions.” Adoption of this rule will bring EASA SLD requirements in harmony with those of FAR Part 25, adopted on Nov. 4, 2014.

September 2015 (tentative)

Position Reporting Proposal from ICAO

Member countries of the International Civil Aviation Organization recommended the adoption of a tracking standard that requires aircraft crews to report their positions at 15-minute intervals. Adoption by the 16-state ICAO Council is expected as early as this fall. Operators would be able to comply with the mandate using existing and planned technologies and procedures, ICAO said.

The proposal is considered a first step toward implementation of a more comprehensive three-tiered approach to tracking normal, abnormal and distress conditions.

Within 6 Months

Sept. 14, 2015

Revised Means of Complying with Icing Certification

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Dec. 1, 2015 and Jan. 1, 2017

European Union Tcas Version 7.1 Directive

Turbine aircraft that are approved to carry at least 19 passengers, certified before April 1 last year and equipped with Tcas II version 7.0 must be upgraded to the latest version of 7.1 traffic alert and collision avoidance system software by Dec. 1, 2015. ICAO does not require that version 7.1 software be installed for international flights as a retrofit until Jan. 1, 2017.

Beyond 12 Months

Jan. 1, 2020

U.S. ADS-B Out Mandate

ADS-B Out equipment must be operational by Jan. 1, 2020, in aircraft that fly IFR in the U.S. and where transponders are currently required—namely, class A, B and C airspace.

Within 12 Months

March 4, 2016

Contract Maintenance Requirements

Certain Part 135 on-demand operators have until March 4, 2016, to comply with new requirements. Under the new rules, Part 135 on-demand operations flying aircraft with 10 or more seats (excluding pilot seats) are required to develop FAA-acceptable policies, procedures, methods and instructions when using contract maintenance. It also requires these operators to provide a list to the FAA of all people with whom they contract their maintenance.

June 8, 2016

Europe ADS-B Out Mandate

The ADS-B Out requirement in Europe is June 8, 2016, for new aircraft and June 7, 2020, for retrofit. The date for retrofits is about six months later than the U.S. ADS-B Out mandate.

Aug. 25, 2016

European Safety Standards for Private Operators

Europe’s new rules for so-called “noncommercial operations with complex motor-powered aircraft” will affect all private operations with large business aircraft and helicopters. Between now and Aug. 25, 2016, which is the final deadline for implementation, operators must develop safety management systems and take other required steps to bring their aircraft and operations to a level of compliance that is “up to the safety standards of commercial operators.”

Meet Ted

One way to cut costs without sacrificing quality is improving efficiency through processes and tools.

It seems like an obvious solution, but for six years, Continuous Improvement and Business Process Manager Ted Roethlisberger has been assisting Duncan Aviation team members across departments and locations as they create more productive workplaces.

“Our customers come to Duncan Aviation because our employees are experts. We recognize that, and we’re asking those same experts to help us through continuous improvement,” says Ted.

For the rest of the story visit www.DuncanAviation.aero/experience/ted.php.
Cirrus Aircraft promoted Todd Simmons and Pat Waddick to president positions. Simmons, who had been executive v-p and chief customer officer, was named president, customer experience. Waddick, who was executive v-p and COO, is now president, innovation and operations.

Bijet International named Thomas Kuhn president and CEO. He succeeds Manfred Gaertner, who is leaving the company. Most recently Kuhn was director of engineering services for VIP and executive jet maintenance business at Bijet’s parent Lufthansa Technik in Germany.

Chris Craft was named president and CEO of the Society of Specialty Finance Group, CEO, most recently president of the bank’s auto/light truck and SFG deposit divisions, succeeds Al Qualey, who becomes chairman emeritus and chief advisor.

Bombardier named John Di Bert CFO. Di Bert, who stepped into his new role on August 10, most recently was vice president of customer service at UTC’s Pratt & Whitney Canada. He takes over from Pierre Alary, who announced in April that he is retiring after 17 years with the company.

Simon Mark Arthur, who holds the title of Lord Glenarthur, was appointed chairman of Hel Air, British Europe’s Avian. Currently president of the British Helicopter Association, Arthur has served as a senior executive with Hanson, as well as a helicopter captain for British Airways Helicopters.

The Experimental Aircraft Association elected six members to its 33-person board of directors. New to the board is Lou Seno, chairman emeritus of Jet Support Services and vice president of corporate relations and government affairs at Embry-Riddle Aeronautical University. Re-elected to the board are Hartzell Propeller president Joe Brown; West Georgia Regional Airport Authority director Barry Davis; Darren Pleasance, who leads Google’s Global Customer Acquisition organization; AviDyne president and CEO Dan Schwinn; and Blue Sky Aero owner and manager Alan Shackleton.

Flight Display Systems named Shango Osei-tutu as CFO and Alison Dominguez as quality assurance manager. Osei-tutu was most recently senior v-p of Fibrilight. Dominguez has more than 25 years of aerospace industry experience, having held the roles of director of quality, export compliance officer, safety director and repair station chief inspector, among others.

Embry-Riddle Aeronautical University appointed Tim Brady interim chancellor, effective August 15.


Michael Amalfitano joined Stonebahr Commercial Finance as executive v-p, senior managing director. Amalfitano led the global aircraft business for Bank of America Merrill Lynch for more than 22 years.

Bell Helicopter promoted Glenn Isbell to senior v-p of its customer support and service organization. Isbell most recently was vice president of business optimization and also has served as vice president of XworX.

Matthew Cram joined Aeron as vice president of contracts. Cram formerly was an attorney for the British, European Avian. This has advised Aeron on a host of issues.

Flyht Aerospace Solutions named David Perez vice president of sales and marketing. Perez was most recently director of travel and transportation at Hewlett-Packard.

Christopher Martin joined the Helicopter Association International as v-p of operations.

ExcelAire named Joe Horowitz vice president of business development.

Carsten Holm was named vice president of technical services for GA Telesis UK.

Mark Wilken was promoted to vice president of avionics programs and operational logistics at Elliott Aviation. Wilken was most recently the company’s director of avionics sales.

Rich Bean was promoted to vice president of Global Jet Services. Bean joined the company in 2012 as director of operations.

Doug Yelton joined Zeltus Aviation as commercial sales representative. Previously, Yelton was a logistics manager for AvCraft Technical Services and also has served with the U.S. Air Force, held operations positions with Saab Aircraft of America and was an AOG coordinator for Atlantic Coast Airlines.

Charles Carroll joined Precision Aviation Services as director of operations. Carroll formerly was the marketing manager for Universal Avionics for the U.S. Southeast region.

Metropolitan Aviation named Steve Betts director of maintenance. He was previously director of maintenance at Capital Aviation.

Constant Aviation named Ron Jennings Midwest regional sales manager.


Scott Dohman joined AIR as sales manager. Dohman recently served as business manager for SafeTech and operations/sales manager for Ontic.

West Star Aviation named Steve Bates as Bombardier and Gulfstream technical sales manager and Wayne Sawyer as Northeast regional sales manager.

Hector Jimenez has joined Lou Martin & Associates as sales and marketing director. He has 38 years of aviation experience, ranging from product design and development to management, marketing and sales.

**Final Flight**

Carolyn Williamson, the long-time executive director of the University Aviation Association (UAA) and founding board member of Women in Aviation International (WAI), died August 9 following a battle with cancer. She was 61. Williamson spent 22 years with UAA, stepping down in August 2014 for health reasons. “The UAA community is heartbroken with the news of Carolyn’s passing,” said UAA president Gary Brewer.

Williamson was active in WAI, serving as staff vice president from 1997 to 2001 and as the founding editor of WAI’s magazine, Aviation for Women. In 2013 she was inducted into the International Women in Aviation Pioneer Hall of Fame and recognized as a Volunteer of the Year. “We have lost a wonderful friend and the aviation education community has lost a tremendous advocate,” said Cassandra Bosco, UAA interim executive director.

UAA has named an award in Carolyn’s honor—the UAA Carolyn Williamson Champion of Collegiate Aviation Award—to be presented annually for outstanding service to the collegiate aviation community and for promoting and nurturing students and future aviation and aerospace leaders. The award will be presented for the first time at the 2015 UAA Fall Conference Awards Banquet on October 9 in Salt Lake City.

**Awards & Honors**

NBA is awarding its Certified Aviation Manager (CAM) scholarships to four individuals, providing support toward either becoming new CAMs or renewing their credentials. The 2015 recipients are Thomas Bumpus, a GII captain with Pennstar Aviation; Jose Serra, a current CAM and captain with Nil Holdings; Ann Widay, a staff aviation analyst with Qualcomm; and Nathan Winkle, director of aviation maintenance with Yum! Brands.

Phillips 66 Aviation named Fred Stadler as the winner of the 2015 Leadership Award. Stadler, a year-round Experimental Aircraft Association volunteer who owns a Cessna 310, in July flew his 6,000th Young Eagle, setting the record for the most volunteer flights by any pilot participant in the program. Stadler began volunteering at EAA 30 years ago and serves as treasurer of a local chapter. He is also the volunteer chairman responsible for the AirVenture Notam booklet outlining arrival and departure procedures.

The FAA formally recognized the recipients of the 2015 National General Aviation Awards during EAA AirVenture in Oshkosh. Honored this year were Mary Schu as Certified Flight Instructor (CFI) of the Year; Donald Streitberger as Aviation Maintenance Technician (AMT) of the Year; Randy Hestliow as Avionics Technician of the Year; and Christopher Hope as FAA Safety Team (FAASTeam) Representative of the Year. Schu owns and operates Mary A. Schu Aviation and has been an active flight instructor since 1977, with more than 20,000 hours of flight time logged. Streitberger is chief inspector for The Kroger Company, where he has served for nearly 30 years. Hestliow has more than 40-year career in aviation maintenance and currently is program director, director of standards and certification and director of accreditation for the National Center for Aerospace & Transportation Technologies. Hope, an active Angel Flight pilot, first volunteered as an FAA Aviation Safety Counselor more than 10 years ago and has conducted 11 safety seminars over the past year.

Able Flight, the charitable organization that provides flight training scholarships and mentoring for people with disabilities, awarded six pins to new pilots and pilots receiving advanced ratings. Randy Green, who was born without feet or hands, had earned his air transport pilot certificate. Others receiving their Able Flight Wings were U.S. Marines Sgt. Adam Ksieleswski, who lost his left arm and a portion of his right leg while serving in Iraq; Scott Abrams, who was partially paralyzed while on duty as a police officer; Raymart Tinio, who was diagnosed as deaf at a young age; and Stephen Carrier and John Robinson, both of whom were partially paralyzed in motor vehicle accidents.
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www.nbaa.org/2015/ain
SEPTEMBER
North American Bird Strike Conference…Sept. 15-17, Montreal, Canada.
Info: (703) 797-2526; www.aaae.org.
Conference…Sept. 15-17, Victoria Conference Centre, Victoria, B.C., Canada.

NOVEMBER
Aircraft Interiors Expo Americas…Nov. 4-5, Seattle Info: (202) 783-3794; www.aiaaconfexpo.org.
Expo…Nov. 5, Dubai, United Arab Emirates. Info: +44 2-9123 7072; www.aiaaconfexpo.org.
Dubai Airshow…Nov. 8-12, Dubai World Central, Dubai, United Arab Emirates. Info: www.dubaiairshow.com.

FEBRUARY 2016

MARCH 2016
HelExpo…March 1-3, Kentucky Exposition Center, Louisville, Ky. Info: www.rotor.org.
Abu Dhabi Air Expo…March 8-10, Al Bateen Executive Airport, Abu Dhabi, United Arab Emirates. Info: +971 (0) 2 419 2714; www.abudhabiairexpo.com.
Sun ‘n Fun…April 5-10, Lakeland Regional Airport, Lakeland, Fla. Info: (863) 644-2431; www.sunfun.org.

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