UAE for Erieye Spy-in-Sky

The brakes were finally taken off at the Dubai Airshow yesterday as the United Arab Emirates announced a $1.27bn deal to buy two new Erieye multi-mission aircraft and upgrade their two existing airborne early warning aircraft. The UAE will be the launch customer for the newly configured system, which fits a new Erieye sensor and secondary maritime radar to a Bombardier Global 6000 business jet platform.

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Emirates, GE Agree $16 Billion GE9X MRO Deal

Emirates signed a $16 billion, 12-year agreement with GE Aviation for the maintenance, repair and overhaul of the GE9X engines that will power the fleet of 150 Boeing 777X aircraft it announced at the 2013 Dubai Airshow. The airline also signed a 12-year OnPoint solution contract with GE Aviation worth $36 million, covering the maintenance and inventory support for avionics, electrical power and mechanical systems on all Emirates Boeing 777 aircraft currently in service and the 44 additional 777-300ERs on order.

Jet Airways Discloses Large Boeing Order

India's Jet Airways is the previously undisclosed customer for 75 Boeing 737 MAX 8s, it was officially revealed at the Dubai Airshow.

The order is the first commercial aircraft purchase to be announced at this year’s event. Airbus is expected to release details of its first Dubai 2015 deal this morning. As part of the order, Jet Airways is converting a commitment for 25 737-800s to the MAX version. Jet Airways did not disclose the delivery schedule. “We need to fix our cost structure; we still have to improve,” Jet chairman Naresh Goyal said. —Jens Flottau
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777-300ER. A BETTER WAY TO FLY. The Boeing 777-300ER’s unique combination of superior range, outstanding fuel efficiency and passenger-preferred comfort has created long-range success for carriers around the world. And with recent upgrades that further reduce costs and boost revenue, now’s the perfect time to add to that success, in the air and on the bottom line. The 777-300ER makes every fleet a more profitable fleet. That’s a better way to fly.
UAE, Saab Strike $1.27bn Erieye Deal

The United Arab Emirates Air Force is to upgrade its two Saab Erieye airborne early-warning aircraft and will buy two new multi-mission systems on a Bombardier Global 6000 platform in a deal valued by the customer at US$1.27 billion.

The contract, which was announced yesterday and signed during the first day of the Dubai Airshow, will see Saab fit new sensors and mission systems to the UAE’s two Saab 340-based Erieyes, while the sensor suite for the Global 6000s will be different. No firm timetable has been revealed, but Abdulla al Hashimi, executive director for UAE’s military communications at the Airshow, said he expects the new aircraft to be delivered “within two years, maybe.”

“We are not going into detail, but it’s a new platform,” said Håkan Buskhe, CEO of Saab. “Increased endurance, of course, but also the suite of sensors is new, and well tested. The UAE will be the launch customer for this. The capability of the sensors and the integration will totally be a game-changer for surveillance capability going forward.”

Saab promises air-to-air, air-to-ground and air-to-sea modes and functionality on the new system, which will become part of its product portfolio and will be made available to other potential customers. “We will, of course, focus first on delivery to the UAE Air Force,” Buskhe added.

Precise details of the new configuration have not yet been made public. The primary Erieye sensor is expected to leverage Saab’s work on Gallium Nitride radar technology. A secondary radar, to provide a maritime mode, is carried in a fairing beneath the fuselage. Imagery released by Saab shows a turreted EO/IR sensor beneath the nose.

Hashimi said that Saab had won the contract over other potential bidders – believed to have included Northrop Grumman’s E-2D and the Boeing Wedgetail – because “we cannot relax, but there is only so much we can do.” He points at the “many layers” of screening at airports, “sophisticated detection and robust security. Our job is always to be vigilant.”

—Angus Batey

Emirates Reviews Security After Metrojet Crash

EMIRATES HAS STARTED a review of security measures at airports throughout the Middle East, Western Asia and Africa as a consequence of the Oct. 31 crash of a Metrojet Airbus A321 in Egypt.

The crash, possibly caused by a bomb explosion, was a “game changer in our industry,” Emirates Airline president Tim Clark believes. The consequences will have to be “addressed on an industry level, but it is not in the hands of the airlines.” And “there are many airports in the world where if people wanted to do bad things, they could.”

The internal Emirates review focuses on ground handling procedures and access to aircraft at various airports. “We have to satisfy ourselves that whatever can be done [to inhibit security breaches] is done,” Clark added.

Emirates has decided to avoid flying over most of Sinai for security reasons but does not completely avoid the airspace, particularly for its Cairo operations. The airline has not made any changes to its Egypt capacity as security reasons. That adds 7-8 min. of flying time on westbound services into the country is “an enormously important market for us.” Emirates is also avoiding Iraqi and Syrian airspace for security reasons. That adds 7-8 min. of flying time on westbound services into Europe.

Qatar Airways CEO Akbar Al Baker says “we cannot relax, but there is only so much we can do.” He points at the “many layers” of screening at airports, “sophisticated detection and robust security. Our job is always to be vigilant.”

—Jens Flottau
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Boeing Takes ‘Judicious’ Look at 737 Ramp-Up

Boeing says it does not feel pressured to increase the planned production rate of the 737 beyond the currently committed 52 per month in 2018 despite the recent announcement by Airbus that it plans to boost A320 family production to 60 per month by 2019.

The manufacturer will, however, “judiciously look at what makes financial sense for us,” says John Wojick, SVP Global Sales & Marketing, Boeing Commercial Airplanes. “We are 42 [per month] today, 47 in 2017 and 52 in 2018.” Wojick adds that “we are comfortably oversold at the 52 rate so we think we can weather any perturbation in marketplace at that rate.”

Airbus signaled last week it will raise A320 family production from the current 42 per month to 60 within the next four years. Airbus is already underway with preparations to increase output to 50 aircraft by 2017 based on stepping up output at production lines in France, Germany, China and the U.S. The manufacturer has added that it does not need new orders to be able to fill production at that rate, but that the newly expanded capacity is already supported by firm contracts.

Boeing says if “it makes sense to do anything more than that [52], that demand needs to be from solid creditworthy customers.” Wojick notes that from 2019-2020 and beyond the 737 MAX line is delivering large amounts of aircraft to customers like Ryanair and Southwest. “We feel pretty good about the blue chip [companies],” he adds.

Boeing internally has studied what rates could realistically match Airbus and has estimated 58 deliveries per month would effectively equal the planned output of A320s by 2019. This is based on the actual production of aircraft averaged out over the year and the impact on deliveries caused by the European summer vacation break. The current firm MAX order backlog stands at 2,901 aircraft from 59 customers.

—Guy Norris

Etihad to Fit Thales HUDs to A350 Fleet

THALES HAS ANNOUNCED a contract with Etihad to equip its A350 fleet with the French manufacturer’s dual head-up display (HUD) system. The order covers the first 12 of the 62 A350s the airline has on order, and delivery of the HUD-equipped jets is due by December 2017.

The order, which follows Qatar Airways selecting Thales’ dual HUD for its A380 and A350 fleets, may be the first of many more contracts from the region. The HUD market is set for a boost, thanks in part to a recommendation from Airbus to operators of the A350 and A380 that the technology be installed on those platforms, and partly to a regulatory recommendation for HUD technology to be installed on airliners in China – a key market for most Middle Eastern airlines.

“It’s not a directive, but it’s a strong recommendation, due to airports in China that are not completely equipped,” says Daniel Malka, VP and general manager of Thales’ avionics services division. “They have set a target to have 50% of the fleet based in China to be equipped by 2020, and to achieve 100% by 2025. Obviously, we’re working hard to be selected by the Chinese opera-

tors, but most Middle East airlines are flying to China and they want to be equipped too.”

Other nations may soon follow China’s lead; Malka says he expects India to “come to the same kind of conclusion” in the near future. Operators flying older aircraft into more austere airfields in other parts of the world could also acquire the technology: Thales’ system is retrofittable to every Airbus airliner from the A320 family onward.

With the 787, Boeing made HUDs standard; at present, the technology is an option on Airbus’ 350s and 380s, not a part of the standard fit. “I don’t expect to see that [Airbus making HUDs standard] happening soon,” Malka says. “And I don’t expect to see a lot of European [airlines] asking for standard dual on all aircraft, because the airports are very well equipped and they don’t see the return on investment. But it will come. Most of the pilots coming from military activities are very used to having a head-up display. They like it and will want to have it.”

—Angus Batey
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Qatar Airways is not interested in taking a stake in a European airline but is looking at the option of buying into Royal Air Maroc (RAM) or Indigo.

Al Baker added. Lufthansa is in the process of folding its low-cost unit Germanwings into Eurowings but is also in the middle of a major strike by flight attendants that has been severely disrupting the airline’s operations since last Friday.

Qatar Airways CEO
Akbar Al Baker

Qatar did not invest in Indigo as part of the recent initial public offering because airlines were prohibited from doing so, but it is still considering to take a minority stake at a later stage. Similarly, Al Baker said he was impressed with the kind of transformation and the business plan of RAM, therefore the airline will “consider how we can partner.”

As far as the upcoming first delivery of the A320neo to Qatar is concerned, Al Baker is “optimistic” and still thinks the aircraft will arrive before the end of the year. “My only concern is Pratt. I hope they will catch up. But they still have six weeks.”

According to Al Baker, Qatar could convert some of the A350-1000 orders to an even larger version of the aircraft should that be offered. The airline has an order for 43 -900s, six of which have already been delivered. It also has bought another 37 -1000s. “But at the moment we are satisfied with the -1000,” he said.

—Jens Flottau

Jazeera and Rockwell Connect on Connectivity

Jazeera Airways will be the lead airline to feature Rockwell Collins’ PAVES wireless broadband, it was announced at Dubai Airshow yesterday. The Programmable Audio Video Entertainment System enables up to 500 passengers to stream video simultaneously and provides a flexible, open-software architecture to support a wide array of apps and services. Service entry will be in December 2016 on seven Airbus A320 airliners, which will also receive the Inmarsat Global Xpress high-speed connectivity system.

“Jazeera Airways is leading the way by implementing the fastest and most-reliable airline inflight entertainment and connectivity solution available,” said Claude Alber, VP and managing director for Europe, Middle East, Asia and Africa at Rockwell Collins.
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Learn more at lockheedmartin.com/lm100j
3-D Printing Grows in Use
For Creating Parts
And Maintenance Tools

3-D printing has obvious applications in, and implications for, speeding up the prototyping process when designing new platforms or modifications. But another key area where aviation can benefit from additive manufacturing is in the provision of spare parts and tools.

“At the moment, we are mainly looking at three categories of services,” says Dr. Mareike Boeger, head of additive manufacturing solutions for the Satair Group (Stand 1913). “One is the replacement of flying parts. The second is maintenance tools. And the third is customized solutions: How can we use 3-D printing to improve or even create new parts for our customers?”

Sometimes, as was the case when a crew seat-belt mount needed to be sourced for an Airbus A310 aircraft operated by Air Transat, the part can no longer be supplied by the original manufacturer: 3-D printing solved the problem. Because flying parts need to be qualified, the applications so far have been for these less safety-critical applications.

“Like with any new technology you typically start with noncritical parts,” Boeger says. “And then as the technology develops we move into more-complex parts, and also parts that have higher requirements in terms of loads.”

The technology also offers the ability to manufacture objects that could not be built by traditional methods. Intricate internal structures may offer identical strength and performance to solid objects but with greatly reduced weight. This has clear benefits for flying applications but can also offer advantages in other, perhaps less obvious, areas.

“You can design things you couldn’t design before and can save weight,” Boeger says. “We already use this for some tools. If you think of larger tools, that maybe a mechanic has to lift over his head or where you might cause damage if you dropped it, there is also a relevance to have lighter tools.”

Satair is demonstrating its 3-D printing capabilities by producing copies of this concept aircraft here.

UAVs Should Fly at Next Dubai Airshow

Plans to fly an unmanned aircraft in the Dubai Airshow flying display did not come to fruition this year, but not because of legal or safety concerns. “All the pilots for those UAVs are in service, working,” says Michele van Akelijen, managing director of Airshow organizers F&E Aerospace. “The UAVs are available – the operators aren’t.” This year’s work should help ensure an unmanned flight at the 2017 show.

Abu Dhabi May Service Q Series in Middle East

Bombardier Commercial Aircraft has signed an MOU and is in discussions with Abu Dhabi Aviation to work toward the establishment of the company as an Authorized Service Facility for Q Series aircraft. The final agreement is subject to acceptance of commercial terms and a final technical audit. When the agreement is reached, Abu Dhabi Aviation will become the first ASF for Q Series aircraft in the Middle East.

Dubai Airports Looks to Increase DXB Capacity

Dubai Airports is looking at new technology inside the terminals and airside measures to further increase the capacity of Dubai International Airport (DXB). The airport operator is faced with increasing congestion at the facility ahead of the expansion of Dubai World Central as Emirates continues to grow faster than anticipated. DXB is expected to hit its maximum capacity of around 100 million passengers in 2020.

Mubadala and GE Form MRO JV for GEnx

Abu Dhabi-based development company Mubadala and GE Aviation are forming a joint venture maintenance, repair and overhaul facility for the GEnx engine, which powers Boeing 787 and 747-8 aircraft. The new venture builds on the 2013 maintenance partnership between Mubadala and GE, and includes the establishment of a regional state-of-the-art MRO facility to be set up at the Nibras Al Ain Aerospace Park, as well as a direct investment by GE in this new venture.

Airbus Forecasts Strong Middle East Growth

In the last decade, travel to, from and within the Middle East has quadrupled. Aircraft such as the Airbus A380, A350 XWB, A330 and A330neo can connect more than 90% of the world’s population via the Middle East. In the next 20 years traffic in the Middle East will grow at 6.0% – well above the world average of 4.6%. This will drive a need for nearly 2,460 new passenger and freighter aircraft valued at US$590 billion.

AgustaWestland Grounds Tiltrotor After Crash

AgustaWestland has halted flight testing of its remaining AW609 commercial tiltrotor following the crash of the second prototype in Italy on Oct. 30. The accident killed two of the program’s most-experienced test pilots. Data from the FDR is now being examined in Rome by a team from Italy’s National Agency for Flight Safety and the NTSB.

Abu Dhabi Aviation Buys AW Helicopters

UAE-based aviation support company, Abu Dhabi Aviation (ADA) has ordered 15 helicopters from AgustaWestland. The order, announced here at the Dubai Airshow covers the purchase of a mix of AW169, AW139 and AW189 helicopters. ADA’s helicopters provide support to oil and gas operations to conduct utility missions and are also contracted to provide search and rescue operations to the UAE authorities.

Piaggio Rolls Out Multirole Patrol Aircraft

Mubadala-owned Piaggio Aerospace has rolled out the prototype of its Multirole Patrol Aircraft. The aircraft was unveiled on Nov. 9 at the company’s plant in Genoa, displaying its lengthened wingspan and enlarged horizontal tailplane and foreplanes. Fuel capacity has also been raised allowing for increased endurance.
For the first time ever, we’re designing a combustor with Ceramic Matrix Composite materials to enable the GE9X to handle the highest pressures and temperatures in aviation history, all while reducing the need for cooling air. But we aren’t going to do it unvalidated. So we built specialized facilities in Evendale, Ohio, where we’re constantly testing, refining and maturing the combustor design to ensure world-class reliability for the world’s next great engine.

See how GE is maturing the technologies that will make tomorrow fly at geaviation.com/GE9X.

Imagination at work.
SAEI Unveils Mega Saudi MRO Facility

Saudi Aerospace Engineering Industries (SAEI) says it’s all-new US$1 billion maintenance, repair and overhaul facility will be open for business by the end of 2016.

The 1 million sq. meter site at King Abdul-Aziz airport in Jeddah is 60% complete and is aimed at both civil and military customers. “We are planning to serve the region and we believe there is a lot of business,” says SAEI CEO Nader Khalawi. The main site will incorporate eight D-check capable hangars divided equally between single- and twin-aisle aircraft. In addition, the site will include a large single-span hangar for line maintenance, a paint hangar and an engine shop with three test cells capable of handling engines up to 150,000 lb. thrust. The site will also incorporate an extensive series of 28 component shops to repair and overhaul avionics and systems. Military service work will be undertaken in a secure, ITAR-compliant area of the facility, says Khalawi.

The facility builds on “almost 56 years of operating experience with technical service of Saudi Arabian Airlines across 28 stations in Saudi Arabia,” says Khalawi. The MRO site was developed under a joint venture led by Turkey’s TAV, Al Rajhi and the Al Habtoor Leighton Group.

The opening of the site will enable SAEI to offer a greatly expanded MRO capability beyond its current offering, which is principally dedicated to supporting Saudi Arabian Airlines. In advance of the opening SAEI says the company has already secured SR 5.3 billion in contracts with Saudi Arabian and third-party companies.

A Series of Simulator Signings for CAE

Yesterday was a busy day on Stand 1632 as aviation training company CAE refilled the corporate fountain pen for a series of signing ceremonies with Middle Eastern companies.

SAEI says SAEI CEO Nader Khalawi.

A third organization, Arab Wings, has expressed satisfaction with the provision by joint-venture Emirates-CAE Flight Training (ECFT) of support for three types of business jets and signed for an expansion to 11. “We have had a very productive relationship with ECFT for the last four years,” said Ahmad Abu Ghazaleh, CEO of Arab wings. “We are comfortable…consolidating our entire training under one provider.”

ECFT will provide training on Bombardier, Cessna, Embraer, Gulfstream and Hawker types at several locations: Dubai, UK, Denmark, Spain and the U.S.

— Guy Norris

CFM president Jean-Paul Ebanga and CFM EVP Francois Bastin watched orders climb again yesterday.

**CFM Passes 2,000 Orders for 2015 at Dubai**

CFM International broke through the 2,000 order barrier for the year here at Dubai when Jet Airways of India confirmed 150 Leap-1B engines to power 75 Boeing 737 MAX previously listed as from an unidentified customer on Boeing’s orderbook.

Although the bulk of the 2,062 orders taken so far this year by the General Electric and Snecma joint venture are for the Leap family, 687 are for the CFM56. Despite its imminent replacement by the Leap, CFM production continues to climb to all-new levels. More than 1,650 engines will be assembled this year and production is expected to peak in 2016 at 1,700.

Overall orders for the Leap, which will power the Airbus A320neo, 737 MAX and Comac C919, have meanwhile almost hit the 10,000 mark. “That has never been achieved on any commercial engine program at this stage, several months before entry-into-service,” says CFM president Jean-Paul Ebanga.

HE Saleh N. Al-Jasser, director general of Saudi Arabian Airlines and Nick Leontidis, CAE Group president for civil aviation training solutions, here at the show yesterday.
There are powerful reasons why 31 armed services across the globe employ 8,500 of our engines to deliver when it really counts. Learn more at www.pw.utc.com.
Boeing Anticipates Fighter Contract Wins

Boeing officials say they have won a couple of fighter competitions in the Middle East that have yet to be formally approved and are "frustrated" at the slow action.

"I think we will see movement early next year," says Paul Oliver, VP of business development in the Middle East for Boeing. "We've been waiting on some approvals from the U.S. government, and we're close to those."

At least one of those competitions is likely to be the sale of F-18 fighters to Kuwait. "To be honest, we're a little frustrated. I know the customers are in the region," says Jeff Kohler. Like the sale of F-15s to Saudi Arabia three years ago, the deal is not likely to be sped up because of ongoing conflict in the Middle East. But he attributed slow progress to government-level geopolitical considerations about the Iran deal. Plus, Congress has asked for information. "We're just worried that the delay could cause them to turn to another provider," Kohler said. "Once they sign a contract with Eurofighter, they're gone for the next 30-40 years. So there's a little anxiety."

—Jen DiMascio

Jetpacks Are ‘Go’ in Dubai

Most aircraft companies exhibiting at the Airshow are struggling to make major sales announcements, but New Zealand’s Martin Aircraft has bucked the trend. In the second half of next year it will begin deliveries of the revolutionary Jetpack, and Dubai is expected to be among the early recipients.

As well as being every schoolboy’s dream, the strap-it-to-your-back flying vehicle has serious applications in search and rescue, military and commercial fields, and it is the Jetpack’s potential for humanitarian missions that has attracted the attention of Dubai Civil Defence.

At a brief ceremony yesterday, Lt. Col. Ali Hassan Almutawa, director of operations, signed an MoU for an initial package of 20 Jetpacks, two simulators, training and support. This, hopes Martin Aircraft CEO Peter Coker, will expand to up to five similar batches.

There’s a Jetpack in Dubai Civil Defence colors to be seen on Stand 2240, together with a virtual reality simulator showing what it will be like to fly along the Dubai waterfront.

—Paul Jackson

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GAL and Airbus Helicopters Remain Partners

Global Aerospace Logistics LLC (GAL) and Airbus Helicopters have announced the renewal of their customer support services distribution agreement. The agreement represents the cornerstone of GAL’s support services strategy and will strengthen its capabilities to keep the UAE Armed Forces at a peak state of readiness. The continuation of this agreement with Airbus Helicopters further enhances GAL’s role as a provider of both routine and urgent customer support services to the UAE’s Joint Aviation Command.

MENA Launches Technics Division

MENA Aerospace has launched a division called MENA Technics, which will offer ground services and line maintenance to local and regional aviation clients. The division will support operators of private and business jets as an independent Maintenance, Repair and Overall provider. MENA Technics will operate from MENA Aerospace’s 6,400-sq. meter hangar and private aviation complex at Bahrain International Airport.

SAEI and Lufthansa Sign MOU for MRO

Lufthansa Technik AG and Saudia Aerospace Engineering Industries (SAEI), the aircraft maintenance arm of Saudi Arabian Airlines (Saudia), have signed an agreement to enter into a strategic partnership. Lufthansa Technik will support SAEI with aircraft component maintenance for Saudia’s A320 and A330 fleet and further assist SAEI to develop the MRO capabilities for Airbus and Boeing aircraft at its facilities in Jeddah, Saudi Arabia. Lufthansa Technik CEO Dr. Johannes Bussmann and SAEI CEO Nader Khalawi signed the agreement here.

Saudi Eagles Get Sniper Sensor Boost

Lockheed Martin has won a $262.8 million U.S. Air Force sustainment contract for Saudi Arabia’s F-15 sensor suite including the Sniper Advanced Targeting Pod, LANTIRN extended-range navigation pod and Infrared Search and Track (IRST) systems. The sale will allow Saudi Arabia to support the sensors in-country. The contract includes collaboration with Advanced Electronics Co. for the Sniper ATP and LANTIRN ER sustainment services as well as LANTIRN ER pod upgrades at the Sniper Expanded Repair Capability facility in Saudi Arabia.

ENOC Fuel Pipeline for Dubai Airports

Emirates National Oil Co. (ENOC), through its Horizon Terminals Ltd. subsidiary, has announced the launch of Project Falcon, a 58-km-long jet fuel pipeline that links its storage terminal in Jebel Ali with Dubai International Airport. The pipeline also includes provisions for the future needs of Al Maktoum International Airport. The project, valued at approximately US$250 million, has state-of-the-art oil terminal facilities with storage capacity of 140,000 cu. meters.

Engine Alliance to Rule on GP7200 Upgrade

The Engine Alliance is expected to decide early in 2016 if the business case justifies the development of an upgrade kit for the Airbus A380 GP7200 engine. The General Electric-Pratt & Whitney joint venture equips around half of the current A380 fleet, the vast majority of which are operated by Emirates Airlines. The 100th GP7200-powered A380, which will be the 69th aircraft for Emirates, is close to completion and, including spares and lease units, will bring the tally of delivered GP7200s to over 440 engines.
The spectacular routines flown daily by two iconic combat aircraft – the B-1 Lancer and F-22 Raptor – have certainly helped highlight the American aerospace community’s participation in the Dubai Airshow. But behind the attention-grabbing displays lies a massively expanded presence by American companies, both here and at the Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) next week.

Across the two shows, around 11% of exhibitors will be U.S.-headquartered companies. And according to Kallman Worldwide, the export-advocacy group that organizes the U.S. pavilions at both shows, the American presence at the Dubai Airshow is more than double what it was in 2013.

Among the 95 exhibitors in the 2,200-sq. meter pavilion are six American states – Florida, Georgia, Missouri, New Hampshire, Virginia and Washington – which bring with them a total of 32 state-affiliated exhibitors.

“The UAE is a vital trade partner and export market for the United States,” says Marcus Jadotte, U.S. assistant secretary of commerce for industry and analysis. “The record participation of U.S. companies in the Dubai Airshow and ADIPEC events continues a long and fruitful partnership that began decades ago, and will extend for decades to come as U.S. businesses become part of the fabric of the UAE economy.”

GE has opened a new technology hub in Dubai. The company’s Middle East Aviation Technology Center will enhance the engine manufacturer’s service offering to customers in the region as well as serve as a base from which data scientists can use the company’s Predix platform to solve business problems. “We’re uniting analytics and physics with software solutions,” says Jim Daily, vice president of systems and digital engineering at GE Aviation. “We see the center as a vibrant facility focused on customer outcomes, where GE and airlines in the region can exchange ideas and collaborate as the world of data grows and changes.”

GE Opens a Tech Center in Dubai

The first in a series of pooling facilities to be launched by Parker Aerospace has opened in Dubai. The warehouse and distribution facility, run with Parker’s global supply-chain management partner SDV, is to be followed by similar locations in other parts of the world to enable Parker to offer more agile support to customers in its key technology areas, which include flight control, hydraulic, fuel, thermal management and engine systems and components. The facility carries an extensive inventory of Parker products for aircraft including the Boeing 777 and 787, and Airbus A350 and A380.

Parker Opens Pooling Center in Dubai

Opening the U.S. International Pavilion at the Dubai Airshow, from left to right: Frank Pace, president, General Atomics; Vice Adm. Joe Rixy, USN, director of the Defense Security Cooperation Agency; Lt. Gen. Charles Brown Jr., commander, U.S. Air Forces Central Command, Southwest Asia; Robert Durbin, COO, Aerospace Industries Association; Tom Kallman, president and CEO, Kallman Worldwide, organizers of the Pavilion; Barbara Leaf, U.S. Ambassador to the UAE; Katrina McFarland, assistant U.S. secretary of defense for acquisition; Heidi Grant, deputy under secretary of the Air Force for international affairs; Marcus Jadotte, assistant secretary of commerce for industry and analysis.
A service network with the same precision and dependability as the engine: predictable costs, flexible solutions, OEM-authorized parts and maintenance. V-Services℠ – a portfolio of options to give maximum life and service to your V2500® engines. Only from IAE. Visit www.i-a-e.com.
UAE Puts Airborne C2 Back on the Agenda

The United Arab Emirates Air Force’s (UAEAF) plan to introduce a new fleet of airborne early warning and control aircraft is part of a wider push to enhance the air and missile defense capability of the Gulf state.

Recent operations in which the UAE had played a role as part of a wider coalition have driven the country to invest in more-capable command and control capabilities.

Brigadier General Staff Pilot Rashid Al-Shamsi, the commander of the Khalifa Bin Zayed Air College, told delegates at the Dubai International Air Chiefs Conference on Nov. 7 that the new C2 platforms would “provide more overhead surveillance and share early warning capabilities” and “allow for a rapid flow-through of information for sensor to shooter.”

Al-Shamsi did not put a timescale on any procurements, but the UAEAF has been exploring options for an airborne early warning capability for several years. Back in 2009, the air arm purchased a pair of Saab 340 regional airliners fitted with the Swedish company’s Erieye radar, but this is largely considered to be an interim purchase allowing the UAEAF to experiment with the capability. It is unclear whether the aircraft have ever been deployed to support UAE operations outside the country’s borders.

Al-Shamsi said the UAE was also investing in a new air operations center that would “serve as the hub for linking together advanced tactical and operational capabilities.”

The air arm has also opened what Al-Shamsi called the Integrated Air and Missile Defense Center of Excellence (IAMDC), part of an “aggressive step” toward the training preparation for emerging ballistic missile threats in the region. The IAMDC has been developed as a result of the UAEAF’s experience with the Advanced Tactical Leadership Course (ATLC), a large-scale air exercise held in the UAE with regional and international air forces including the U.S. and UK air arms.

“The long-term goal of IAMDC is to use a multilateral approach and cooperation exercise and training with regional partners like with the ATLC,” said Al-Shamsi.

The center will pave the way for new missile defense programs including the planned Terminal High-Altitude Area Defense system (THAAD) system, which is expected to be delivered to the UAE shortly. THAAD would allow the formation of a multi-layered missile defense capability in conjunction with in-service systems including Patriot and Hawk.

“These systems will provide the UAE with a more timely and upper- and lower-tier response capability,” Al-Shamsi said.

Other priorities for the air arm include the introduction of a remotely piloted air system and new low-collateral precision-guided munitions.

—Tony Osborne

UAE Officials Lift Lid on Yemeni Operations

Emirati defense officials have lifted the lid on the country’s support to the Saudi Arabian-led coalition operation in Yemen.

Major General Ibrahim Nasser Al-Alawi, the commander of the United Arab Emirates Air Force (UAEAF), told delegates at the Dubai International Air Chiefs Conference on Nov. 7 that UAEAF aircraft had now flown some 40,000 flight hours in support of the ongoing operation in Yemen, operating from six locations in Saudi Arabia and inside Yemen. “None of this would have been possible without a professional fighting force,” Al-Alawi told air chiefs.

Officials were unwilling to answer further questions on the ongoing operation, which began in March with air strikes on the Houthi rebels who had deposed President Abd Rabbuh Mansur Hadi.

The details emerged as the first UAE armed forces personnel returned home after completing their duties as part of Operation Restoring Hope. Saudi officials recently stated that around 75% of Yemen is back in the control of Abd Rabbuh Mansur Hadi’s government. He is currently governing from the southern coastal city of Aden, rather than the capital Sanaa, however.

The UAE is reported to have a large involvement in the Yemen operation. Air assets involved are known to include around 10-15 F-16E/F Fighting Falcons, and UAEAF Airbus A330 Multi-Role tanker transports as well as the C-17 and C-130 airlifters. Recent TV images from Al-Anad air base near Aden showed UAEAF Iomax AT-802 Border Patrol Aircraft being flown by Yemeni pilots, suggesting they had been gifted to that country. The same images also showed UAE Bell 407MRHs operating from the same location.

Lt. Gen. Charles Brown, commander of the U.S. Air Force’s Central Command, told ShowNews at the conference that the U.S. was assisting the Yemeni operation with aerial refueling as well as some limited intelligence and logistical support.

—T.O.
ExecuJet to Open in India; Expands Middle East Fleet

After years of searching for a foothold on the Indian subcontinent, ExecuJet Middle East has partnered with an as-yet-unnamed Indian partner to operate a fixed-base and maintenance operation at New Delhi International Airport. More detailed information including the partner company’s name will be revealed here at the show.

The opportunity came along, and with the right partner, we tendered and were successful,” said Dubai-based Mike Berry, VP ExecuJet Middle East. The joint venture was awarded one of two concession air licenses to operate an FBO and MRO at New Delhi.

ExecuJet Middle East (Stand 1800) will have added five large-cabin business jets to its managed fleet by year-end, making a total of 22 from the region. Three aircraft have been delivered with two more due. They include a Bombardier Global 5000, a Dassault Falcon 2000, a Gulfstream G450 and two Bombardier Global 5000 Vision aircraft. The fleet total could reach 23 or 24 by year-end if other ongoing discussions come to fruition.

“Our fleet composition is moving more to long- and ultra-long-range aircraft; sadly though, we have access to only five of these aircraft for charter on an ad hoc basis when the owners release them. We’re working hard to find more aircraft that will give us access to charter as well,” said Berry. The largest aircraft in the fleet are a BBJ and an Embraer Lineage; the latter is available for charter.

It was thought that after Dubai International Airport (DXB) completed the refurbishment of its two runways last year, it would mean the end of business aviation movements at the airport except for aircraft flying in for MRO work. This, however, didn’t occur and an ordered transition of business aviation from DXB to Dubai World Central (DWC), rebranded in August as Dubai South - Al Maktoum International Airport, is taking place.

A purpose-built Executive Aviation Terminal (EAT) is under way at DWC to cater for its several specialist handling companies (including ExecuJet) who currently operate from a finger of the main airline passenger terminal. According to ExecuJet’s Mike Berry, the EAT should be completed by year-end and operational by January 2016.

Some FBO companies have signed up to operate from the new EAT but ExecuJet has bought land to build its own FBO/MRO and will probably move into the new EAT as an interim measure until its own facility is operational, possibly by the end of the third quarter 2017. Berry emphasizes that the company’s luxury VVIP FBO passenger terminal and large MRO (employing 345 people) at DXB is still the center of its operation in Dubai.

Zurich-based ExecuJet Aviation Group (which was acquired by Luxaviation Group in May this year) offers FBO, MRO, aircraft management and aircraft charter services across Europe, the Middle East (with two operations in Dubai, one in Riyadh and one in Istanbul), Africa, Australasia and China. At this show the company will be celebrating 15 years in the UAE and 10 years of MRO operations here.

—Mike Vines

ExecuJet Middle East Awarded FAA Approval

ExecuJet Aviation Group has been awarded certification by the Federal Aviation Administration (FAA), having demonstrated regulatory compliance of its Dubai Repair Station under Federal Aviation Regulation (FAR) Part 145.

The ExecuJet Middle East approval includes the ability to conduct heavy base maintenance activities and non-destructive testing (NDT) inspections, while also entitling the company to work away from its fixed Dubai location. ExecuJet Middle East (Stand 1800) holds a total of 21 approvals, inclusive of EASA and all Middle East regional approvals, while also representing several manufacturers and OEMs.

ExecuJet Middle East VP Mike Berry says ExecuJet has been working on FAA approval for quite some time “and now we can support all ‘N’ registered aircraft in the region.” —MV

ExecuJet Zurich Achieves IS-BAH Accreditation

ExecuJet Aviation Group has received accreditation by the International Standard for Business Aircraft Handling (IS-BAH) for its FBO in Zurich, becoming the first FBO in Switzerland, and one of the first across Europe, to hold this industry-leading certificate.

The IS-BAH is a global code of best practices for business aviation ground handlers assessed through a safety management system, which crucially recognizes that FBOs need to plan and conduct operations in a standardized way. The IS-BAH follows the long-established structure of the IS-BAO program, used by operator clients, and is a joint program between IBAC and NATA.
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Zephyr ‘Pseudo Satellite’ Tested Dubai’s Airspace

Among the biggest obstacles to the development of the global unmanned aircraft market are the legal and technical issues preventing routine flights of UAS (unmanned aircraft systems) alongside conventional air traffic. Last year, an experimental flight took place in Dubai that answered some of these questions.

The UAS flown was unusual in a number of regards. The Zephyr 7, built in Farnborough, England, by Airbus Defense & Space, is a very lightweight (less than 50 kg) aircraft designed to fly above other air traffic for extended periods. The company has designated the platform a HAPS - high-altitude pseudo-satellite - and is marketing it as a capability that combines elements of UAS and satellite operations.

The challenges it faces during normal operation are therefore considerably reduced compared to those that affect heavier and lower-flying platforms. But Zephyr’s flight in Dubai took off and landed close to Dubai International Airport, without impacting on normal airfield operations.

“Zephyr is just another aero-plane under Next Generation airspace where, under IFR [Instrument Flight Rules] with Mode S ADS-B [mode select automatic dependent surveillance - broadcast], separation can be achieved,” Zephyr’s lead designer, Chris Kelleher, told ShowNews earlier this year. “You place a donut, or whatever shape, of airspace around the aircraft, and block off altitudes as the aircraft is climbing. Other aircraft can route around it.”

This concept of operations is subtly but significantly different from the practice by which other UAS are currently - though still only very occasionally - flown in unsegregated airspace. This generally involves temporarily closing airspace to other air traffic while the UAS is flying. By maintaining a smaller “bubble” of airspace around the Zephyr itself, the wider airspace is not closed. Other air traffic avoids it in the same way it would avoid any other aircraft.

To prove the concept near to one of the world’s busiest airports required very close cooperation between Airbus D&S and the Dubai Civil Aviation Authority (CAA).

“We had the head of the Dubai CAA present on site during the entire flight, just to make sure things went right,” Kelleher recalled. “In principle, the flight path is entirely predictable from launch, because we have quite accurate forecasts of the winds. We’d aim to have a fixed rate of climb, and to ascend within a designated area - so we can provide a flight plan for that path, and air traffic would know that, and we’d call off blocks of airspace every 5,000 ft. At each stage of the ascent we would get permission to climb, or we can level off and wait.”

When flying into the wind the large, lightweight, solar-powered aircraft has “virtually no ground speed,” according to Kelleher. (Paul Brooks, Airbus ADS-B will work with TCAS [traffic collision avoidance system].” Kelleher noted. “The issue is how quickly that’s brought in for lower and uncontrolled airspace. At the moment we can segregate that airspace without really inconveniencing anyone. But it will come that even microlights, and maybe even things like parachutists, will in principle be carrying Mode S ADS-B for collision avoidance. IFR is probably the easiest way for a UAS to operate, because you don’t then have the same sense-and-avoid visual issues.”

The development of Zephyr is continuing, with the lighter, slightly larger Zephyr 8 nearing completion at Airbus’ Farnborough facility. Strong rumors of a sale to the UK’s defense ministry (MoD) remain unconfirmed, though a recent series of contract awards made in September following a competition run by the ministry’s Center for Defense Enterprise (CDE) suggests MoD has an ongoing commitment to the class of aircraft of which Zephyr is, at present, the sole member. One contract, to examine LTE

Chris Kelleher died suddenly in August, aged 58. Before founding the Zephyr program in 2002, he had worked on all six of the UK’s Skynet military communications satellites. An avid pilot, he won the UK’s advanced aerobatics championships three times. He is survived by his wife and four children.
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