

Police Aviation News

©Police Aviation Research

Paris Air Show Number 2011

PAR



PARIS AIR SHOW 2011

PAN—Police Aviation News is published monthly by POLICE AVIATION RESEARCH, 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK. Contacts: **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** BrynElliott **E-mail:** editor@policeaviationnews.com

PARIS AIR SHOW 2011

Dateline: 22 June 2011

It is perhaps unfair to report on just one day of a seven day show and make too many conclusions about how it went so please see this as a flavour of the beast that was the 2011 Paris Air Show at Le Bourget Airport. It was a long 22-hour day undertaking this 'sampler' but it was worth almost every moment. Other more youthful and hardy reporters were at the show for longer but I suspect overall the event will leave a similar 'taste' for them also.

Organisationally Paris 2011 may not have been the warm, flawless and sparkling event we have grown to expect and the rain shoulders most of the blame for that. The weather blighted each of the early days and for half of each day outside activity was at best restricted. That was good for the indoor exhibitors – the halls were very busy – but getting to the event, always difficult, became worse than usual with the inclement weather. Where large numbers normally choose to walk from the railhead the option became impractical for positively attending in just business suits. For the first time the shuttle coaches from the railhead were sponsored, a wholly positive development that saved attendees time and cost and the organisers the need to set up a means to collect the necessary payment. Unfortunately the weather trashed most of the gain. The areas of cover for the crowds streaming out of the station were sparse, loading slow and the 10 minute journey to the airport stretched to 35 minutes by the heavy rain and traffic. The result was a lack of buses to get on and hundreds were stranded in the deluge under inadequate cover and often blessed with inappropriate clothing and insufficient or broken umbrellas. It was not quite what was hoped for in terms of enjoyment and barely warm enough for the soaked to dry quickly. When the rain finally ceased on the stroke of twelve, the sun came out and was soon fiercely hot and the atmosphere steamy. The latter part of the week was a typical hot day in Paris experience.



A decade on from 9-11 security seems to suddenly gripped both organisers and a select few of the exhibitors with many previously easy tasks taken on the mantle of a very Gallic 'not possible.' In the event the substance of each instance quickly proved to be baseless and quite possible; all based upon illusory difficulties. At times you may wonder what the concept of an Air Show is about when everything possible is put in the way of admitting even the invited and supposed industry professional show audience. Getting into the site was 'not possible,' viewing and photographing the aircraft in both the AgustaWestland and

LONG RANGE • HIGH BIT-RATE • RELIABLE MICROWAVE DATA LINKS

AIRBORNE GROUND

XING

**BIDIRECTIONAL - AUTO-TRACKING
MULTI-CHANNEL - DIRECTIONAL
DIVERSITY GROUND
RECEIVE SYSTEMS**

**MICROWAVE TRACKING ANTENNAS
AND MAP-BASED CONTROLLERS**

TROLL SYSTEMS

+01 (661) 702-8900

www.TROLLSYSTEMS.com



Honeywell
OBSERVER
 MKIII Mission System

Honeywell UK Limited (Skyforce)
 Enquires: mission.systems@Honeywell.com
 Website: www.skyforce.co.uk

Eurocopter static areas was similarly denied for the most incomprehensible reasons. As you will see from this report, each was achieved but why the difficulty? But, I can report that the rest of industry seems not to have been gripped by this ‘security’ malaise that instead looked like the worst case of self styled superiority and the rest actually welcomed their *industry professional* show audience to view their products with open arms. Stand tall Beechcraft, Bell, Cessna, ... etc etc...

The headliners of the show fall outside the content of *Police Aviation News*, like Farnborough it is principally a heavy metal event where the niche interests of Homeland Security and surveillance barely gets a look in. Most readers will be aware that the Airbus A380 scheduled to entertain unfortunately banged its wingtip into the Embraer building damaging both and effectively removing the aircraft from the show. The A380 was swiftly taken from view and taken back to Toulouse after inspection but the dented building remained as testament to the error. Underlining that this was home territory, not one but two replacement A380s were found to ensure the show went on.

For Airbus though the highlight of the show was a little smaller in size from its super jumbo – the relatively new and previously almost tentative A320neo upgrade grabbed a massive order from an Asian carrier in the final hours of the trade show. It was not really a surprise when low-cost carrier AirAsia finally let everyone fully in on the worst-kept secret at the Paris show, with a spectacular firm order for 200 A320neos. This was the largest ever order for the A320 family but half of the shows final total for the type.

The first footing big aircraft were from US rival Boeing, they brought along the 787, the new 747-8F and backed them up with examples of the 737, 777 and a military C-17.

Indra is a relatively new name in PAN’s market sector since the use of flight training devices started to gain an increasing acceptance. Readers may recall the Eurocopter USA AS350



device and the EC225 system in Aberdeen and that they have shown interest in the market sector including the PAVCon.

The link the company has with the sector was muted at 'heavy metal' Paris and FTD's were somewhat lost among the exhibiting of its electronic defence and radar surveillance systems as well as the latest developments in unmanned platforms. The Spanish company is one of the most active European partners in the development of representative systems such as the Praetorian radar or Eurofighter DASS system of electronic defence and its UAV's are more the type of interest to high spending military formations rather than cash strapped police operations. The company employs more than 31,000 and has clients in more than 110 countries.

Eurocopter was displaying some of its newest helicopters and difficult to fault mock-ups at a variety of locations across the show. The highlight for them though was the first public appearance of the X3 (X-cube) hybrid helicopter demonstrator which gave a spirited performance in a brilliant blue sky – after the dark rain clouds had dispersed. Increasingly Eurocopter are showing signs that they have a belief that the concept has commercial promise. It seems the economics of two large engines driving the main rotor and the forward propulsion propellers are manageable so perhaps this long sought after configuration will see a production outcome in time.

The accompanying commentary was good enough to bring a smile to any old hacks face. Just how many times did the commentator mention the Fairey Rotordyne! In addition to being decades later the technology is very different from that earlier project – it had tip jets on the main rotor and the forward propulsion was provided by wing mounted engines. The design was everything that the clunky 1950s gave us – compared to the sleek X3 very much a flying brick.

Also available for flight display at Chalet H was the EC175 first prototype (PT1), developed and built with China Aviation Industry Corp. (AVIC). Illustrating an example of continued development of the legacy product line was the AS350B3e Stylence. Eurocopter hosted an event for current and past Ecureuil-series operators on June 23.

Among the aircraft and mock-ups at the static display for EADS were a French Gendarmerie-configured EC135T2+ c/n 0747 JDE, one of the first delivered in 2009, Fenestron-equipped EC145T2, AS535 MB Panther from the controversial Bulgar-



Indra/AEC



PAN



EC175 & Panther

PAN

ian Air Force contract and a mock-up of the EC175 in search and rescue (SAR) configuration. A Tiger and an EC725 Caracal were at the French General Directorate for Armament (DGA)'s static display.

For each of the industry days a whole tranche of announcements came out of the press office, mostly for large aircraft orders but occasionally for small orders in important market sectors. Selling into China is one area where small is significant applies.

In the USA it is the numbers game. Air Methods continues to expand their Eurocopter exclusive fleet and signed up for four more AS350 B3's. Their fleet now includes more than 240 helicopters and that is without their recent acquisition of Omniflight. Air Methods now operates more than 75 AStar helicopters. An additional AS350B3 is being delivered to the police in Angola.

The University of Michigan's Health System, American Eurocopter and Metro Aviation announced that the first EC155 in U of M's order of three has shipped to Metro Aviation for completion. When completed, this aircraft will be the first EMS-configured EC155 in the United States – a significant development for a type that still struggles to find too much favour.

Eurocopter Malaysia signed a Fleet Upgrade and Retrofit contract for the five EC135s belonging to Hornbill Skyways. The Contract's work scope involves upgrading two EC135 P2 to the EC135 P2e version, increasing its payload by 40kg to a maximum take-off weight of 2,950kg. It also includes the installation of inlet barrier filter (IBF) as well as the replacement and upgrading of the High Frequency system for all the 5 helicopters.



Interior rear crew station of the French Gendarmerie EC135T2 displayed by Eurocopter.

Enterprise Control Systems Limited

Digital Video Airborne Systems • COFDM Tactical Data Video Links

• Portable Receiving Systems • Observation Networks





ECS provides secure digital COFDM uplink and downlink systems for all data Applications and users

Specialist design through innovation and technology





www.enterprisecontrol.co.uk

Tel: +44 (0) 1327 860050 Email: sales @enterprisecontrol.co.uk

Hawker Beechcraft Corporation (HBC) took their customary booth position in front of the on-site Le Bourget Air Museum promoting their long lasting and ever popular King Air Range of twins. The main promotion was of the Special Mission King Air 350ER turboprop and a King Air B200 operated by the Armed Forces of Malta. The former was configured with ambulance litters and the latter in the surveillance role.

King Air 350ER: HBC markets, produces and supports a whole range of special mission aircraft for commercial applications, militaries and governments worldwide. The King Air 350ER offers extended range, long endurance, and can be configured with a variety of intelligence, surveillance and reconnaissance capabilities, as well as air ambulance and other special mission applications. Within the fuselage of the new dedicated 350ER demonstrator Spectrum Aeromed exhibited their self contained litter option which is the one that HBC promote in their package – the smaller Maltese airframe covered the sensor aspects for the show.

“This aircraft represents our commitment to the worldwide special mission market,” said Jay Gibson, vice president, Special Missions. “The unique configuration is designed to showcase the outstanding flexibility and versatility of the King Air 350ER.”

The basic airframe has been around for a long time now - over 40 years - but continued product development has kept the model at the leading edge of its market niche and that is why the type is still promoted as fresh and new – such as filling the latest fleet of Australian Royal Flying Doctor Service – and is often found to be replacing its similarly aged contemporaries including the Jetstream and Islander.



Aerodata crew station in AFM Beechcraft King Air

PAN



Spectrum litter fit in the Beech 350

PAN

COOLSPPOOL

The latest 28.5 volt GPU range

Faster, cooler starts. Perfect for shaft or free turbines. Essential for FADEC aircraft.

NEW Mini 17 A/Hr portable GPU. Built-in charger, digital voltmeter, protective padded jacket.

Massive performance, true portability, amazingly low weight.

Models from Mini 17 A/Hr to 260 A/Hr Ramp Cart

CALL NOW!

+44 (0)1934 643000

email: info@powervamp.com



Powervamp™

Powervamp Ltd, Weston-Super-Mare, England
www.powervamp.com

The main roles include reconnaissance and maritime surveillance missions, air ambulance, utility transport and other special mission roles. The demonstrator aircraft's registration number N1459 reflects the number of special mission King Air turboprops sold to date 1,459. This includes all models of the King Air line-up sold specifically for special mission applications.

The demonstrator is equipped with the following equipment:

- Search Radome. The aircraft is equipped with a belly mounted-search radome designed for the latest digital search radars. The radome is available as a kit in two variations, one electrically tuned to state-of-the-art digital maritime radars and the other tuned to optimize overland radars.
- EO/IR Lift and Fairing. The aircraft is equipped with an EO/IR lift that allows a Star Safire/HD or Wescam MX-15 turret camera system to extend during mission operation, yet retract to minimise aerodynamic drag during the transition flight to/from the surveillance area.
- Air Ambulance. Two medical sleds and a medical cabinet are positioned along the right side of the interior. These are fully functioning medical sleds from Spectrum Aeromed. These sleds are designed to fit a range of aircraft. Numerous operators operate a mixed fleet with a wide range of cabin sizes and a variety of roles, the exact airframe available for an air ambulance mission can be fluid and tended to require the operator to have a variety of equipment. Hitherto it has been rare to find a litter that will easily fit across the fleet from a King Air down to a LearJet – let alone also fit in a helicopter. For Spectrum Aeromed the 'one size fits all' equipment can reduce the market in terms of sheer numbers but the expectation is that it will win them sufficient new customers to mitigate those factors.
- Troop Seating. The left side of the aircraft interior was fitted with five forward facing chairs, demonstrating the Aviation Fabricators (AvFab) 11-chair interior configuration. The new AvFab Traveler style chairs make the most efficient use of cabin space, are light weight and allow quick reconfiguration of the cabin for missions ranging from full troop seating to air ambulance and cargo.

All of the special mission modifications on the demonstrator aircraft are certified by the FAA and available from the factory.

Upon conclusion of the show, the 350ER embarked on a tour that includes stops in Europe, Africa and Latin America, with future plans for Asia.

The Government of Malta King Air 200 is outfitted with a highly sophisticated Aerodata designed and installed surveillance suite interpreting the inputs from the radar and the L3 Wescam MX-15 sensors.

Hawker Beechcraft Corporation is headquartered in the USA and has facilities in Wichita, and Salina, Kansas; Little Rock, Arkansas; Chester, England, U.K.; and Chihuahua, Mexico. www.hawkerbeechcraft.com.

Another production airframe with a past is the Canadian Viking Twin Otter Series 400, an aircraft programme designed to bring back to production the de Havilland Canada original with modern systems. The task has been steadily accelerating since the launch in 2007, and deliveries from Viking's headquarters at Victoria International Airport are being made to customers around the world.

The first Viking Series 400 Twin Otter, manufacturer's serial number (MSN) 845, was delivered last year to launch customer Zimex Aviation and has now been relocated from Zimex headquarters in Switzerland to Uganda, where it is being used to support the oil and gas



Reims F406 Land & Sea Surveillance

The logical economical choice of many operators
Police, Fisheries, Coastguard, EMINT, EEZ patrol.

Recent sales and deliveries
Serial No. 90, 91, 92, 93, 94, 95

Bob Crowe Aircraft Sales Ltd
Tel: +44 (0)1234 750442
www.bobcroweaircraft.com
sales@bobcroweaircraft.com

industry. In addition to the new Series 400 aircraft, Zimex operates a fleet of twelve legacy Twin Otters used to support the oil and gas industry, humanitarian agencies, and non-governmental organizations worldwide.

The second Viking produced aircraft, MSN 846, was delivered earlier this year to Air Seychelles, who operate the aircraft as a domestic commercial carrier from the company's base in Mahe to the outlying islands of the Seychelles archipelago in the Indian Ocean. The Series 400 Twin Otter has been added to Air Seychelles fleet of three legacy aircraft, and will help the company to improve service and better cater to customer needs.

The first float equipped Series 400 Twin Otter, MSN 848 has also been delivered to launch customer Trans Maldivian Airways (TMA). They will have three eventually.

The Viking aircraft include a number of major safety enhancements to the type as standard including traffic collision avoidance system (TCAS I), cockpit voice recorder and flight data recorder, new cabin interior compliant with 2010 safety standards, warning systems for terrain avoidance (Class A TAWS) and the integration of the Honeywell Primus Apex avionics suite. Other changes include upgraded Pratt & Whitney PT6A-34 engines, use of composite materials, light weight interior, simplified electrical and LED lighting systems, as well as value added options such as de-ice and air-conditioning.

Following on the heels of a multiple aircraft purchase from the Government of Peru, a second major purchase agreement for four Viking Series 400 Twin Otters has been executed with PT Airfast Indonesia. The aircraft are scheduled for delivery in 2012 and 2014, and will be configured for land operations to expand Airfast Indonesia's current fleet of three legacy Twin Otters used on charter in the mining industry.

The Airfast Indonesia and Peruvian Air Force purchase have significantly increased the Twin Otter Series 400 order book, combining with continued world-wide customer deliveries to rapidly increase the market presence of the aircraft.

Approximately twenty-five percent of the new Twin Otters sold are Guardian 400's, developed for special mission and government operations in medium range maritime patrol and critical infrastructure support.

"SIMPLY UNBELIEVABLE"



WESCAM's MX-10 continues to take the industry by storm! Who would have thought that footage captured from a demo would have created the buzz it has. As the saying goes... You have to see it to believe it!

Check it out on **YouTube** www.youtube.com/watch?v=s703HcD6_Zc

WESCAM's MX-10 is a small ball that is visually as powerful as its predecessors – the MX-20 and MX-15. With 6 sensor options, and weighing in at under 37 pounds, this turret would be your best investment to date. For more information visit wescam.com or call 1-888 668 4355

Bell Helicopter, an open door policy in place, displayed its newest commercial helicopters, the 407GX and 407AH [see cover photo] - enjoying their first international appearance since their introduction at the 2011 Heli-Expo in Orlando, Florida, in March.

"We've received tremendous customer acceptance of these two new helicopters since their introduction." said Larry D. Roberts, Senior Vice President, Commercial Business for Bell Helicopter. "The Bell 407GX is in a league of its own with the capability and situational awareness provided by the Garmin G1000H glass flight deck. Customers are really seeing the benefits of this innovative technology and the Bell 407AH provides unique flexibility for parapublic missions that cannot be found anywhere else in the market."

After the Paris Air Show, the 407GX and 407AH will embark on international demonstration tours that will last several months. The 407GX will demo throughout Europe, while the 407AH will be shown throughout the Middle East and will demonstrate its performance capabilities during the BRIDEX air show in Brunei, July 6-9, 2011.

Both products are extensions of the popular and reliable Bell 407 with more than 1,000 delivered worldwide. The Bell 407 includes operational features such as a choice of maximum internal gross weights, high main rotor clearance (8 ft), excellent hover performance, powerful FADEC controlled engine, comfortable seating for seven, and optional Quiet Cruise kit. Blade fold capability, cargo hook, and a host of OEM kits and customizing offerings make this aircraft ready for any mission. The Bell 407AH comes equipped with a baseline law enforcement package that can be customized with multiple weapon configurations.

Thankfully Bell can call upon a vast military programme but even that has exhibited hiccups in recent years but the commercial sector is visibly struggling with few positive news stories circulating at Paris. Positive news relates to the Huey II fleet recently surpassing the 300,000 flight hour milestone but the Vietnam era thread in the production line continues unabated. The Huey II Modernization Program may well be the only original equipment manufacturer-approved UH-1H performance upgrade available today but it is not the stuff of the 21st Century.

With signs that Bell are losing out on sales to traditional customers at every turn until June 2011 the only modern modern programmes were the 429 and the 609 tilt-rotor. One of those has now slipped away.

Back in March John L. Garrison, president and CEO of Bell Helicopter was wrong footed in Orlando when the then AgustaWestland CEO, Orsi, told the press that the 609 programme was going to transfer from being a joint project with Bell to be one wholly administered by AgustaWestland. Clearly Bell saw the announcement as premature but now it has come to pass.

Bruno Spagnolini, the new Chief Executive Officer, AgustaWestland, stepped back from the announcement and apparently allowed Bell's Garrison put out the formal confirmation that AgustaWestland has agreed to purchase Bell's ownership interest in the BA609 tilt rotor. Bell Helicopter will remain the key supplier of engineering services and key components to the program.

"Both companies agree it is the best business decision for AgustaWestland to take owner-

Operational success at a fraction of the cost

The most economical aircraft in its class, coupled with big payload ability and a spacious cabin Airvan is the new choice for mission critical situations.

Our fully certified air surveillance package includes:

- Operator work stations
- Equipment racks
- Retractable sensor system
- Dedicated electrical system for special mission payloads
- Many other features.

GA8 Airvan™



A Mahindra Aerospace Company

Call us now on Ph: +61 (0) 4 6749 1295 to speak with our Special Mission representative about your specific requirements

GippsAero Pty Ltd, A Mahindra Aerospace Company | Latrobe Regional Airport, Traralgon VIC 3844, Australia
sales@gippsaero.com | +61 3 5172 1200 | www.gippsaero.com

ship of the programme with Bell Helicopter serving as the key engineering and component supplier," said John L. Garrison, president and CEO of Bell Helicopter. "This decision will free up research and development resources allowing Bell Helicopter to increase our investment in the revolutionary V-22, to develop the next-generation tiltrotor technologies for U.S. Department of Defense programmes and other applications, as well as increase our investment in our innovative commercial product line," he said.

The agreement is subject to obtaining requisite regulatory approvals and does not include the transfer of V-22 tiltrotor technologies.

The situation is far brighter for the 429 – if only that there are no obvious business partners to pass it on to as befell both the highly successful 139 and the unknown quantity 609. The bumpy ride continues with the weight issues but they look likely to be resolved. It is not exactly an airframe issue more certification compliance problem. The weight of the aircraft is hovering [excuse the pun] between JAR27 and JAR29 and obviously the wish is for it to fall firmly into JAR27 as the 29 regime will cost both manufacturer and customer considerably more to operate within.

Meanwhile the aircraft are selling and entering service, the the USA there is an air ambulance operational and a US police aircraft imminent on the East Coast.

At every show there is someone with a begging bowl looking for a sponsor to help complete certification. Aero Sekur was at the show to interest helicopter manufacturers in helping to develop its crash-landing protection system for helicopters, which it introduced last year at the Farnborough air show.

The crash-landing protection system for helicopters is the combination of two of Aero Sekur's products. The first is emergency flotation equipment for helicopters, for which the company claims it is a world leader in technology and deliveries, and the second is a system for landing spacecraft on planets. The former, one of the company's core products, is approved and in use on AgustaWestland A109 and A139 series helicopters. The latter, "an intelligent



agustawestland.com

AW169

VERSATILITY NO LIMITS

Engineered to satisfy the most demanding Law Enforcement mission requirements

Generous cabin space and exceptional accessibility for maximum flexibility

Designed to grant intensive utilisation with low operating and maintenance costs

 **AgustaWestland**
A Finmeccanica Company

The advertisement features a black and yellow AgustaWestland AW169 police helicopter in flight over a city. The helicopter has 'AW169' and 'POLICE' written on its side. The background is a red-tinted cityscape. The text is white and black, providing technical and marketing information about the helicopter's capabilities and the company's branding.

airbag system,” as Butler described it, is under development for the European Space Agency’s ExoMars program, and is set for a mission to the Red Planet in 2018.

The crash-landing system for helicopters uses airbags, an array of sensors and non-pyrotechnic valves to control and cushion landings on water and land. With the aircraft in descent and right before contact, the airbags inflate in about two seconds and the sensors (accelerometers and attitude gauges) determine the vertical and side velocities. The sensors can tell when the aircraft makes contact with water and keeps the valves closed to provide floatation for the stricken helicopter. If the airbags touch down on a hard surface, the sensors (now also using pressure gauges) determine its shape and slope. The sensors then adjust the sequence of the opening of the valves to deflate the airbags so that they absorb impact loads and bring the aircraft down to rest as level as possible.

The crash-landing system is designed to deploy during the last few seconds before impact. Sekur estimate that a crash-landing system on a medium helicopter, such as an AW139, could cost the customer about \$120,000 to \$150,000.

The S-76C++ helicopter is now officially out of the salesmans catalogue according to an announcement made by the manufacturer at Paris. With a 30-year legacy of safety and reliability as its foundation, the S-76D™ helicopter is the next generation and continues to progress toward first customer deliveries in 2012.

“With aircraft number 822, the last S-76C++ helicopter closes out that production program and we are looking forward to introducing the newest version in the series, the S-76D, when we deliver the first aircraft to the launch customer next year,” said Tim Fox, Senior Program Manager for the S-76® helicopter program. “The helicopter market is beginning to show optimism again. The S-76 C++ aircraft weathered that storm and the S-76D helicopter will carry forward a legacy of durability and safety to a new generation of customers.”



Introducing the CARRY-VIEWER™ III!
Downlink Live Video to Ground-based Response Teams!

A picture is worth a thousand words. Downlink live video to special response teams on the ground with the Carry-Viewer™ III. The Carry-Viewer (CV III) receives the live downlink from your aerial source and lets you see live video on the CVIII color screen. Improved reception is achieved through the CV III's state-of-the-art two-way diversity reception with active antennas.

To learn more about Downlinks and how the CV III can be a vital part of your Downlink system, visit www.bms-inc.com, or call 800-669-9667 (US) / 858-391-3050.

- COFDM Demodulation
- DVB-T Compliant
- 2-Way FFT/MRC Diversity
- Lightweight and Rugged
- On Screen Menus
- Daylight Viewable
- 3+ Hours Battery Run Time
- BTP (BMS Transmission Privacy)
- Automatically Adjusts to All Transmit Parameters

The Downlink Experts™
Broadcast Microwave Services, Inc. **BMS**
A Cohu Company

Final assembly of the S-76D helicopter began in December 2010 at Sikorsky Global Helicopters' manufacturing facility in the USA. Aero Vodochody in the Czech Republic, which has produced more than 300 S-76 airframes for Sikorsky, is manufacturing the S-76D fuselages.

Sikorsky Global Helicopters will install Pratt & Whitney Canada PW210S engines, blades, and gearboxes during final assembly, followed by acceptance flight tests and customer completions.

Sikorsky announced the contract to sell one S-70i BLACK HAWK helicopter to the state of Jalisco in Mexico. It will become the first state in Mexico to acquire its own Blackhawk.

Jalisco is one of 31 states in Mexico, and borders the state of Michoacan, a high-risk area in President Calderon's war on drugs and organized crime. With the Pan American Games to be hosted in Jalisco's capital of Guadalajara later this year, the helicopter acquisition is part of a state initiative to increase safety and security in advance of this world event.

Sikorsky Aerospace Services has signed of an agreement with RUAG Aviation to designate its Alpnach helicopter facility in Switzerland as an authorised Customer Service Centre to support the Sikorsky S-76® helicopter platform.

RUAG's facility will offer Sikorsky S-76 helicopter operators complete aftermarket support – including Sikorsky trained local maintenance personnel for on-site comprehensive maintenance management, inspections and spare-parts procurement.



Sikorsky

Helicopter Searchlight

The HSL-1600
A Technologically Superior Searchlight

- Large Profile Mounting Plate Stabilizes the Searchlight Beam
- Streamlined Aerodynamic Frame
- High Speed Solid State Drives
- No External Junction Boxes or Power Supplies
- Integrated Slaving Capability with FLIR, Moving Maps, & Other Mission Equipment
- Integrated High Performance IR Option
- Laser Target Designator
- MTBF of 5000+ Hours



AIRCRAFT EQUIPMENT

REVUE THOMMEN AG
Hauptstrasse 85
CH-4437 Waldenburg
Switzerland
Phone +41 61 965 22 22
Fax +41 61 961 81 71

Sales Office USA
16633 Dallas Parkway
6th Floor, Suite 600
Addison, Texas 75001
Phone (972) 588 1811
Fax (972) 588 1801

www.thommen.aero
info@thommen.aero

SEE US AT AEA - JULY 20-23 / BOOTH #1139

AgustaWestland announced that the fleet of eight AW109 Power light twin helicopters of Koçoğlu Aviation Inc. of Turkey has achieved the milestone of 10,000 flight hours in just two years. The eight AW109 Powers, operated by Sky Line Transportation Trade Inc., a Koçoğlu Group company, have been successfully operating across Turkey in demanding hot and high conditions, achieving an exceptional 97% dispatch availability rate. Within this 10,000 hour total over 3800 EMS missions have been performed. Three Izmir based AW109 Power's pilots, out of the total of 73 pilots employed by Skyline Aviation, have now logged more than 1200 flying hours each on the AW109 Power.

INAER, the global provider of aerial emergency services and aircraft maintenance, has signed a contract for ten AW169 helicopters. These aircraft will be used for various applications across INAER's markets.

The contract marks another outstanding success for the all new AW169 model, just a few months after its commercial launch earlier this year. A significant number of firm orders have already been logged worldwide for a range of applications. The AW169 helicopter programme, which was unveiled at the Farnborough International Air Show in July 2010, is progressing as planned with the first flight scheduled in 2012 and certification in 2014. Deliveries are expected to follow immediately after certification is obtained.

INAER's helicopter fleet already includes more than 60 AgustaWestland helicopters single and light twins such as the AW119Ke, AW109 Power, Grand, GrandNew and A109 series helicopters as well as more than 20 AW139 medium twin engine helicopters. INAER also recently ordered 10 of the all new AW169 light intermediate helicopter. INAER is a leading European on-shore helicopter service provider and the AgustaWestland helicopters are used to perform various missions including public passenger transportation, Search and Rescue, EMS and fire-fighting. INAER acts as an AgustaWestland Service Centre in various European countries including Spain, Italy, UK and France to offer on-site support services. PZL-Świdnik has signed a Memorandum of Understanding (MoU) with INAER to expand both companies' businesses in the fire fighting market over the next ten years, in particular in Spain, Portugal, Italy and France. The MoU is focused on the specialised W-3A Sokół medium twin helicopter and support services and it is intended to meet INAER's fleet modernisation and expansion plan requirements for fire fighting operations.



Taking Aerial Surveillance to the Next Level

Maximise the effectiveness of your mission with the Skyquest family of surveillance solutions.

SYSTEMS



VDSU-1407
Video Management System

DISPLAYS



AVDU-5008
20" HD Mission Display

RECORDERS



VRDV-3000
CompactFlash Video Recorder



www.skyquest.com
Tel: 01628 891017 or
International: +44 1628 891017
Email: sales@skyquest.com



Agusta Westland has selected the e-APU60 of Microturbo (Safran group), a new concept of auxiliary power unit specially designed to meet the requirements of new-generation aircraft which will need more electrical power, to be installed on the AW149, new-generation medium class multi-role helicopter. The key features of the e-APU60 that have contributed to this selection are: best power-to-weight ratio, exceptional compactness, streamlined architecture and high pressure cycle based on innovative technologies, insuring high reliability, low operating cost and remarkable performance.



The newcomer from AgustaWestland carried the new Thommen searchlight on its port side.

Thommen

The e-APU60, capable of delivering electrical power up to 60 kWe, will ensure the electrical start-up of the engines (on-ground and in case of in-flight shutdown) and also cabin warm-up.

Aviation and Police English Language Training Specialist English in your technical field

Helimetrics Ltd has unique experience training qualified helicopter pilots and support personnel to do their job in a new language. Using total immersion and one-to-one training, Helimetrics Ltd will help you and your team master the English language in your flying and police service missions.

Telephone: +44 1608 642231 or email josmond@helimetrics.com to get the measured view....

Helimetrics Ltd, 14 Cooper Close, Chipping Norton, United Kingdom





The all electric Cri-Cri, jointly developed by EADS Innovation Works, Aero Composites Saintonge and the Green Cri-Cri Association was displayed and flown. In September 2010, the world first four-engine all-electric aerobatic plane took off for its maiden flight. Since the first flight, the team has carried out an extensive test flight programme. Cri Cri has performed more than nine hours of flight, including aerobatic manoeuvres. In all-electric mode, the plane's performance during climb and aerobatics is better compared to a conventional aircraft of this type - with no noise and high torque at low and

high speed. During the testing campaign, improvements of the system could be achieved mainly in the field of energy management. One important aim is to increase endurance of the flight. Time has been already increased from 20 minutes at the beginning to 30 minutes. Further improvements should bring it to at least 35 minutes. The all-electric Cri Cri flew six minutes per day during the show.

On the Thursday of the show Eurocopter honoured the Ecureuil family's past and present operating excellence, while looking to the future. The day-long celebration at the Paris Air Show served to mark the Ecureuil helicopter family's nearly four decades of operational excellence, bringing together more than 1,000 invited guests – including operators of the rotary-wing aircraft, as well as suppliers, managers and others.

This event at Le Bourget Airport's heliport includes the initial delivery of Ecureuil's latest version – the AS350 B3e – along with informational kiosks that provide details on Eurocopter's support and services, training and innovation for this product line of helicopters. Also on display is an AS350 in Eurocopter's Stylence version, which merges ergonomics and advanced technology to provide fully-equipped in-flight offices for business executives and companies. The Ecureuil family is produced in multiple single- and twin-engine variants: the AS350 B2 and B3e, EC130, AS355 NP and AS550 C3e. All of them share the same family features – excellent performance, high reliability, multi-mission capability, and innovative design. Eurocopter's latest version is the AS350 B3e, which has a more powerful Turbomeca Arriel 2D turboshaft engine, a new-generation digital Full Authority Digital Engine Control (FADEC) and an engine data recorder for condition monitoring. The AS350 B3e received its certification this month from the



NOWHERE TO HIDE

- Leading edge technology
- Trusted reliability
- Legendary Zeiss optics

Innovative. Superior Observation Solutions from Carl Zeiss Optronics

Carl Zeiss Optronics (Pty) Ltd, Nellmapius Drive, Irene, Centurion, 0157, South Africa, Phone: +27 12 674 0215, Fax: +27 12 674 0198, airbornesales@optronics.zeiss.com, www.zeiss.com/optronics



We make it visible.

European EASA civil aviation authorities, and the initial helicopter is being delivered today during the Ecureuil celebration to Mafate Helicopters, based in La Réunion, France.

Eurocopter's Ecureuil made its maiden flight in June 1974, and already was well ahead of its time, reflecting the optimum balance between cost and efficiency – while also keeping the emphasis on operational safety in a full range of missions. This led to a series of technological innovations that included the Starflex main rotor and fiberglass-reinforced plastic blades, along with an advanced tail rotor configuration.

There also was a significant increase in the amount of composite materials used in the airframe for reduced weight, increased corrosion protection and lowered operating costs. Additionally, the Ecureuil had fewer parts when compared to other helicopters of the time, along with the application of simplified assembly procedures.

Ecureuil's nearly 40-year history has generated some very impressive numbers: more than 5,000 helicopters built, some 22 million total flight hours logged, and record-breaking performance that includes the world's highest takeoff – performed with a production Ecureuil operating from Mount Everest at an altitude of 8,850 metres.

These helicopters are being flown in all types of missions: law enforcement, medical airlift, utility, newsgathering, business and private transportation, along with light armed reconnaissance and aerial scout missions in military service.

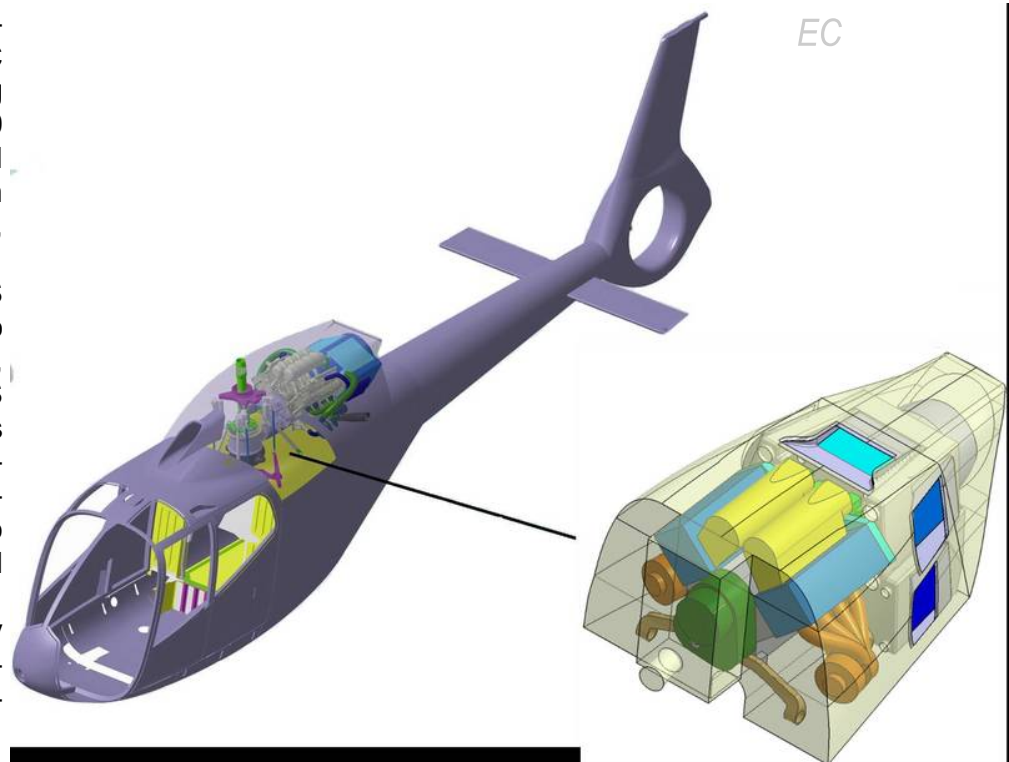
SonicStar, a proposed new supersonic aircraft that could reach speeds up to Mach 3.5, was introduced on Monday at the Paris Air Show by HyperMach Aeronautics. The company says it has developed a design using a "revolutionary" new hybrid electric gas turbine engine, and is seeking investors and partners to help launch a prototype by 2021. The airplane is designed to fly at 62,000 feet, carrying up to 20 passengers in a luxury cabin. The company's website says the design has eliminated the problem of sonic booms over land, which are prohibited in many countries, by using "groundbreaking technology" that allows "aerodynamics to be controlled."

A bit closer to realisation Eurocopter, Austro Engine, Megachrome and TEOS Powertrain Engineering set up cooperation to decrease future helicopter fuel consumption and CO2 emissions.

Eurocopter decided to increase the range of the EC 120 by significantly reducing the fuel consumption up to 40 % with using turbo charged diesel engines running on aviation jet fuel (e.g. Jet-A1, JP-8)

To achieve this goal EADS Eurocopter decided to choose Austro Engine, Megachrome and TEOS Powertrain Engineering as partners. Austro Engine particularly is experienced in installing Jet-A1 powered turbo diesel engines into general aviation aircraft.

This cutting edge technology is partly funded by the European "Clean Sky" Programme.



Eurocopter is to deliver three additional EC135 helicopters to the French Gendarmerie, and will continue supporting this police force's current 12 EC135s through an extension of the company's existing contract.

This new acquisition agreement will allow the Gendarmerie to expand its multi-role, twin-engine EC135 fleet, which is principally used for police and medical evacuation missions.

These EC135s ordered to date will eventually replace the police force's single-engine Ecureuil helicopters, which they have been operating since 1980.

The aircraft on display at le Bourget was one of the early EC135T2+ deliveries, c/n 0747 JDE which entered service two years ago.

The first upgraded Puma Mk2 helicopter developed by Eurocopter in a life extension programme for the UK's Royal Air Force performed its initial flight last month from Eurocopter's facility at Marignane, France.

It is the first helicopter to be modified under the Puma Life Extension Programme, which was approved by the UK Ministry of Defence in September 2009 and placed on contract with Eurocopter UK.

This programme will extend the operational life of the Puma helicopter fleet and is to significantly enhance its capability – particularly in demanding hot and high conditions. It will improve the safety and performance by providing new engines, a digital flight control system, increased platform survivability and enhanced navigation and communications.



The unique capabilities of the Schiebel CAMCOPTER® S-100 UAS are making slow headway towards civil acceptance. The company expects to see the S-100 used in a variety of situations and for tasks previously unimaginable. The drone's outstanding performance in recent high-voltage power line inspections in Austria again demonstrated the S-100's versatility but have yet to see a ready acceptance by the certification authorities.

DATRON SCOUT

The Datron Scout Air Reconnaissance System is a small, rugged and lightweight unmanned Micro Air Vehicle designed to capture and transmit high quality video and images in the field. There are many similar devices on the market and perhaps the most familiar examples are manufactured in Germany. None to my knowledge make, and strongly defend, the claim that their craft can survive and operate in winds of 50km/h [30mph].

The Scout's mobility as a vertical take-off and landing (VTOL) vehicle affords it the ability to silently hover and stare at any point of interest, without the need for a fixed launch or landing platform. A robust design coupled with snap together assembly of the mainly polycarbonate component parts makes the Scout fit for missions in a broad range of environments. Like all of the genre the Datron Scout is a small, rugged and light-weight Micro Aerial Vehicle designed to capture and transmit high quality video and images. Like all the others Scout offers a camera platform able to silently hover and stare at any point of interest, without the need for a fixed launch or landing platform. It has only four small electric motors and an operational weight of 1.3 kilograms the system is extremely quiet and difficult to spot, allowing for covert or overt operations in the field.

Unlike some of the others assembly is tool-less and the disassembled package is smaller and so more easily man-packable to deployment. At the core of the Scout's USP is that it is a weather-proof design able to operate in windy, wet, dusty, hot and cold environments.

More details can be found at www.dtwc.com +1-760-597-1500 3055 Enterprise Court, Vista, CA 92081 USA

ATTRACTIVE OPTIONS

Latest edition available worldwide on-line
 Downloadable PDF in handy size no need to read on-line
 Easy crew room print-outs
 Full 12 months archives at the click of a mouse
 Research data files freely available on-line

NO SIGN UP NO HIDDEN CHARGES



www.PoliceAviationNews.com
A wealth of on-line resources





PAN



AW

AgustaWestland at arms length and the former Bell Agusta 609 that will be an AgustaWestland project in future



PAN

Russian Beriev Be-200 [right]
Van mounted Bell 429 interior mock-up [below]
Aerodata crew station on the company booth [right]



PAN



PAN