

PAN – POLICE AVIATION NEWS is published monthly by INTERNATIONAL POLICE AVIATION RESEARCH 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK +44 1992 714162 Editor Bryn Elliott **Digital Downlink** BMS - CAM A powerful ally Flir Systems Straight to the point Honeywell Observer Power in a box Powervamp Turning the blades Turbomeca Oxford Conference & Exhibition Airborne Response **Emergency Services On-line resource Police Aviation News** Airborne Law Enforcement Association ALEA European Law Enforcement Association P.A.C.E. London Air Show Earls Court in April

EDITORIAL

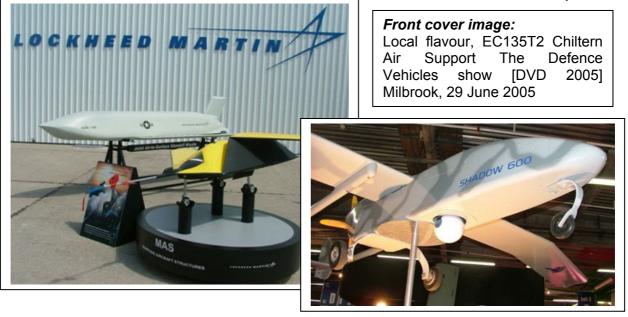
Although it was arguably an event dominated by the short daily demonstration flights by the Airbus A380 last month's Paris Air Show was overtaken by unmanned air vehicles, many were military but more than a fair percentage were clearly aimed at civil markets. There were many current flying projects to be seen as hardware and many more proposals in model, mock-up and artists impression form. No matter where you went there were examples to be seen. It was clearly indicative of a growth industry – or if not of a strong fad.

The show authorities would not have UAV's flying this year but it seems that they will be more likely to accept them in the air in 2007.

It might be easy to dismiss UAV's in civil aeronautics, I for one firmly believe that the human eye is a far better tool than anything a mere 'toy plane' can carry. But the tide is turning against such dated thinking and it is clear that in some roles a UAV can start to make inroads to old fashioned thinking. Fire spotting over a remote forest fire and maritime surveillance are important roles where such craft can earn their living. Who knows what further inroads the type of digital camera FLIR have just announced will make in finally sidelining the human eye?

Even the UK CAA – famous for entrenched thinking – have been quoted as expecting a flood of UAV's in controlled airspace before too long. That may well yet herald a nail in the final demise of the air observer position.

Bryn Elliott



LAW ENFORCEMENT AVIATION AUSTRALIA

QUEENSLAND: Early in June Queensland police launched a manhunt for an escapee who was allegedly part of a plot to break another convict, a murderer, out of a prison near Cairns. The suspect was being sought over a foiled jail-break plan that involved the hijacking of a helicopter allowing a prisoner to escape from the Lotus Glen Correctional Centre.

The inmate, serving life for the 1996 murder of his de facto wife, allegedly paid another prisoner to act as middle man to arrange for others to hijack the helicopter to pick him. The foiling of the plot left two of the three main prisoners involved still in custody. [AAP]

FRANCE



PARIS: Not for the first time the police in Paris have made use of an airship to assess the capabilities of the type for surveillance.

The new generation Zeppelin NT dirigible airship was at the Paris Air Show displaying. Over 30 years ago a different generation of police used an Airship Industries craft to cover a Paris summit but that did not lead to any increase in aircraft use by Paris police. [Economie Matin/IPAR]

JAPAN

AgustaWestland has collaborated with Kanematsu Corporation in gaining a helicopter sales contract from the Japanese National Police Agency. The police have awarded a contract for three AgustaWestland A109 Power helicopters to be deployed with local Police Agencies in Hyogo, Mie and Tokyo, to be used for police patrol and rescue operations.

Ed: The National Police Agency purchases aircraft for more than forty police air units operating a wide variety of types. At one time the fleet exhibited a very strong US bias but in recent times this has swung clearly towards the products of European manufacturers.

UNITED KINGDOM

CAMBRIDGE: Police helicopter pilot David Crisall has been banned from driving - after he was caught driving at nearly 120mph on the A1. The National speed limit in the UK is 70mph. Crisall was clocked travelling at 118mph in his Alfa Romeo 166 on the A1M at Alconbury by officers from the Cambridgeshire force in the early hours of January 21. He had just left duty flying the police helicopter. He admitted speeding and was banned from driving for 21 days, fined £400 and ordered to pay £35 costs.

The period of disqualification meant it would be difficult to get to RAF Wyton where the helicopter was based and might also affect the flying rota but the short ban would mean he could continue with the job.

A Cambridgeshire police spokesman has stated that members of staff convicted of any criminal offence would face a review to assess whether there is a need for internal misconduct proceedings. [Cambs Evening News]

DEVON & CORNWALL: The only operator of the Eurocopter BK117C-1 [G-DCPA] recently downsized its operations for a number of weeks after sending their helicopter into Police Aviation Services for some lengthy engineering work.

Their temporary mount was the former Essex Police AS355F2 [G-EPOL] now owned by Sterling Helicopters and registered G-BMTC. [A-B]

DORSET: Dorset Police continue with their attempts to extend their flying hours to 24/7.

In the middle of June the police appealed to Purbeck District Council to allow the use of their Explorer helicopter between the additional hours of 2am and 7am.

Statistics show that so far during 2005, from a total of 385 flights, only three have taken place during the hours of 2am and 7am and this was only the return of the helicopter after its deployment earlier in the day. The application does not seek to extend the flying hours beyond the existing as that would require additional crewing resources, but to ensure that operational capability is unrestricted by time of day and night. It is estimated that should permission be granted the Explorer may fly on an average of 30 occasions per year between 2am and 7am. ^[Media]

HUMBERSIDE: Construction is underway at Humberside Airport on a new base for the police helicopter. Police chiefs hope the new base will mean faster response times because the helicopter will be more central than its current home in Beverley. It was hoped the new base at the Kirmington facility would be finished for the end of June. Humberside Airport is already a base for helicopter operations, and boasts the second busiest heliport in the country. CHC Scotia has been based at the airport for over five years, servicing the North Sea gas rigs, but helicopters have operated from the airport for more than 20 years. The design and construction of this facility has been undertaken by North Killingholme-based Clark Construction. [This is Scunthorpe]

METROPOLITAN: With its new fleet of Eurocopter EC145s still to be ordered, the London Police is seeking new pilots for its operation.

The new advertisement [Flight 28 June] is offering £50,000 and a London allowance to new pilots from mid-August.

• Current UK ATPL (H) or JAA CPL (H) Licence, preferably endorsed with the AS 355F/N and instrument rating

- 2,000 hours total time
- 1,500 hours PIC Helicopters
- 500 hours twin turbine helicopter
- 500 hours overland in VMC low level operations
- 100 hours night with 50 hours PIC
- Previous experience in the Police Air Support role is preferable.



Covering the current fleet – likely to be in service for some time yet – an AS355N and instrument rating endorsement and the other preferences are specified. Either way the figures offered show an increase on previous advertising.

NORTHERN IRELAND: McAlpine Helicopters has delivered Northern Ireland's first police helicopter into the Province. Already it has been hailed by the Chief Constable Hugh Orde as a significant help in maintaining order during the marching season.

Costing a reported £3.7m the Turbomeca powered Eurocopter EC135T2 brings a stateof-the-art Wescam camera with a downlink capability to civil policing based at Aldergrove in County Antrim.

The police already operate a fixed wing BN2T Islander which was originally operated by the Royal Ulster Constabulary [swept away by the political requirements of the Good Friday Agreement]. All previous helicopter missions were undertaken by the British military, another factor that did not sit well with the Good Friday Agreement.



The annual budget for the helicopter operation is given as £750,000 [\$1.3M] per year. As is the case with other UK police operations the EC135 will be flown by civilian contract pilots working with two police observers. Police plan to use it 18 hours a day, seven days a week. [IPAR/BBC]

SCOTLAND: As the G8 summit at Gleneagles draws closer, the question is being asked: is Scotland ready for the G8? Some fear not.

The event is not now just a security area designed to ensure the major politicians are safe there. What will happen when up to a million protesters arrive in the city in the first week of July. The movement to increase the profile of the situation in Africa has changed much.

Edinburgh will undoubtedly bear the brunt of the expected chaos, playing host to a march of around 100,000 people on July 2 by the Make Poverty History coalition. Then there is the Live 8 concert on July 6 - the day the G8 summit begins in Gleneagles - which Bob Geldof wants an audience of one million to attend.

The statistics are worrying. If Geldof's million do turn up, the city will swell to three times its normal population and to twice the size which experts believe it can hold.

An exercise carried out for Lothian and Borders Police in the run-up to the Millennium suggested that the 'capacity' of the city, including its normal population of 450,000, is 750,000. Even if only half of those requested by Geldof arrive the city will overflow.

The G8 summit in Genoa showed that anti-capitalist hooligans present will be the threat to even a nominally placid gathering.

Some shops in Edinburgh have announced that they will be closing. Others may decide otherwise on the day. Already JP Morgan Scotland - employing 500 people in Glasgow - has told staff to work from home using computers.

There are indications that Scotland's criminal justice system is feeling the strain already. Clearup rates for a series of crimes have fallen across Scotland as officers are taken away from front-line duties to prepare for G8. Cover may be stretched so thinly that forces might no longer be able to tackle ordinary crime in the other police forces involved, Tayside and neighbouring Central Scotland. [Scotland on Sunday]

UNITED STATES

FEDERAL: A 29-year-old woman, who was seven months pregnant, gave birth to a son in a Border Patrol helicopter flying over the Arizona desert at the end of May.

Elva Hernandez felt contractions and went into labour after walking in the heat, rain and in the cold of night for nearly 20 hours as she and her family tried to illegally enter the United States. The family group was abandoned by a smuggler soon after she went into labour. She gave

birth in the helicopter minutes after being rescued by US Border Patrol agents. Mother and premature baby, Christian, a US citizen, were taken to a hospital in Tucson.

CALIFORNIA: Last month thousands of aviation buffs and their families turned out to watch a close-up demonstration of law enforcement helicopters at the Hansen Dam Recreation Center for the 12th annual American Heroes Air Show, featuring helicopter rescue squads from the US armed services and police and fire departments from surrounding cities and counties.

People from across California were there to speak to and take pictures of police and other agency members and pay out just \$25 to ride on one of about a dozen helicopters.

Every year since 1993, the free event has featured aircraft that potentially get called out to duty during the show. Just to prove that Los Angeles County fire-fighters left the show to put out a fire in San Dimas. That did not help the written schedule greatly! [Daily News]

Ed: Types noted at the event included a Bell 47, Los Angeles County Sikorsky Firehawk and a Bell, Glendale Police MD520N, Los Angeles County Sheriff Sea King, US Coast Guard SikorskyHH-60, a Bell AH-1 Cobra tank buster now converted to operating in the fire fighting role and a Television AS350.

ILLINOIS: It is reported that Chicago is again to have air support. A police helicopter unit The Illinois Regional Air Support Service started by the Chief of Police with the City of Countryside has acquired a retired Illinois State Police Bell OH-58 to create the service.

The unit will be supported by partnering with the public and private sectors, creating a consortium of agencies. The Bell is presently being made airworthy by the Gary Jet Center with a plan to undertake a September 2005 activation date.



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



AIR AMBULANCE AIR AMBULANCE BERMUDA

On June 13 Bermuda's new \$2M air ambulance was unveiled at a formal ceremony in St. David's, with attendees paying a special tribute to the man who made it all possible. Ninety-one-year-old philanthropist David Barber, who arrived in Bermuda by boat in 1930, has donated over four million dollars to charities Island-wide since 2000 – dedicating this latest substantial donation to the memory of his wife Mary.

The Cessna Citation S2 aircraft, which is now owned by Bermuda Air Medivac Limited (BAM), will make it possible in Bermuda for the first time to fly those in need of specialist emergency attention to the United States and Canada within only one or two hours.

ITALY

At the Paris Air Show Bell/Agusta Aerospace Company was displaying the first AB139 equipped for emergency medical service (EMS).

The aircraft, operated by the Italian company Airgreen, will be used for EMS applications during the 2006 Winter Olympic Games in Turin.

The internal dimensions of the large and unobstructed AB139 cabin make it an ideal choice for primary and secondary EMS applications. The flat floor and ceiling provide maximum cabin flexibility for easy reconfiguration. An eight cubic metre cabin volume and the height of 1.42 metres allow medical attendants easy access to casualties. Litter layout ranges from two to four in medevac configuration. If cabin access to the large baggage compartment is utilized, litter capacity can be increased to six. [A-B]



POLAND

AgustaWestland has announced the delivery of the first A109 Power to the polish operator Samodzielnym Publicznym Zakladem Opieki Zdrowotnei Lotnicze Pogotowie Ratunkowe (LPR). The Power will be the first light twin IFR equipped helicopter registered in Poland.

LPR provides medical transport in Poland with 16 bases around the country and will use the A109 Power to replace one of its existing 19 Mi-2 helicopters that have to be phased out of service before 2009. The A109 Power will be equipped with Collins avionics, EFIS, moving map display, FM radio, an ICS integrated satellite telephone and a complete medical suite providing a new standard to the Polish aero medical community. [AW]

UNITED KINGDOM

CHILTERN: The operation has lost another prospective helipad site for taking patients into Reading, Berkshire.

It is claimed that lives could be put at risk after the last possible Reading landing site for the air ambulance was ruled out. The Thames Valley and Chilterns air ambulance, which attends about 800 serious accidents a year, has run out of places to land in the town after bosses at Royal Berkshire Hospital confirmed they would not be building a £500,000 helipad on the top of the multi-storey car park.

The helicopter has previously had permission to land at Battle Hospital, The University of Reading's Whiteknights campus and Reading School. With Battle Hospital closing and the educational institutions withdrawing the use of their grounds for health and safety reasons,

victims of accidents in the Reading area will now be redirected to hospitals in nearby towns, which all have helipads. In many cases this will double the time to hospital.

Between April 2004 and March 2005, the air ambulance was scrambled 416 times in Berkshire and 808 times across the Thames Valley and the Chilterns. [Evening Post]

GREAT NORTH The Great North Air Ambulance Service has announced that the grounded BO105 helicopter 'Pride of Cumbria' will take to the skies again on the August 1. Prior to the grounding in March this year the helicopter had flown in excess of 200 missions in the six months since being launched in August 2004.

From 1 June the Great North Air Ambulance Service began its first ever TV Campaign. A 30 second advertisement showing clips of the crew is a call to action for the public to support their air ambulance.



Funded entirely from public donations GNAAS operates a Helicopter Emergency Medical Service across the northern region of England covering Cumbria, Northumberland, Co Durham, Teesside and North Yorkshire. During the last full year these life saving helicopters flew 1436 missions, the medical trauma teams on board saved many lives, and this includes the 200 missions flown by the now grounded BO105 'Pride of Cumbria'.

'We are asking everyone in the region to give at least fifty pence a week to support their air ambulance'. Said Grahame Pickering, Chief Executive of GNAAS 'The charity saw a drop in donations early in the year, after the Tsunami appeal and the floods in Carlisle. The lack of funds meant we had to ground two of our helicopters, we want to increase our sustainable income which is why we are asking everyone in the region to give a regular monthly donation.' This is the first TV campaign by an air ambulance in the area, and it is hope that all members of the public will support their local life savers.

Lakeland Radio subsequently reported that the television campaign urging people to pledge donations for the struggling air ambulance was proving a success.

The same charity is also pressing politicians to back calls for cash from speed cameras to be used to help fund its core activities. Graham Pickering set out his stall by explaining ...

To maintain and develop an air ambulance service requires regular sustainable income in support of public donations, to some extent this has been achieved with regular giving campaigns and our own trading company, which earns money through its re-cycling business. However despite these best efforts a shortfall exists which prevents the delivery of a consistent service. There is a way however to address this shortfall that is both related and acceptable to the vast majority of the general public.

'Over the last few months I have discussed with a number of agencies and individuals the logic of the air ambulance receiving a proportion of the monies generated from road safety speed cameras. However I am told that the latest advisory handbook specifically prevents ANY money being used to fund anything other than promoting speed and red light cameras consequently this common sense and perfectly acceptable solution cannot be advanced because the rules will not permit it.

'Speed cameras are here to stay and the role they play in reducing accidents is admirable; however controversy regarding the revenue they generate and its disbursement continues to irritate the public. If therefore the public approve some part of the money generated by speed cameras being used to fund air ambulances and neither the police nor the local safety camera partnerships object then why is it that the rules cannot be changed?'

Mr Pickering has asked that Great North Air Ambulance receives 30% of the revenue generated from Speed cameras from within the region it serves. This would provide a regular and sustainable income allowing the Charity to maintain and improve the service it provides.



SOUTH EAST. An air of expansion in the South East of England is quietly raising blood pressures on its own. It's all about a proposal to expand HEMS services into Sussex and Surrey south of London.

The problem it seems is that the proposal to 'extend the service into Sussex' has met with the surprised reaction of the existing Sussex Air Ambulance!

Mr David Philpott the chief executive of Kent Air Ambulance Trust is aiming to make the trust's life-saving helicopter service available for emergencies in Sussex. Although the Kent fundraisers accept that Sussex ambulance has access to the police helicopter based in Shoreham on the south coast it is apparently ignoring that fact and claiming that Sussex is one of the few counties in the UK that has no dedicated air ambulance.

Mr Philpott is reported to have said that 'The Charity Commission has agreed we have the experience and expertise to develop the service in Sussex with the aim, ultimately, of Sussex having its own air ambulance within 12 months.

'However, we cannot use money raised in our county to operate the service for the people of Sussex.

'We need to raise £50,000 in Sussex before we can start flying to emergency call-outs.'

Kent air ambulance has flown 10,000 missions in the last 15 years and saved 400 lives. From September it will have a doctor on board for the first time, allowing them to take care to the patient.

A helicopter such as the MD Explorer used by Kent costs £3.5M but if £50,000 is raised it can operate in Sussex, from its base in Marden, Kent. The helicopter will be able to reach the heart of Sussex in just 15 minutes. Once £250,000 is raised the trust will place an order for a helicopter dedicated to working in Sussex and operating from the area of London Gatwick Airport. [Surrey online/IPAR]

Ed: Backed by a positive vote by the Trustees of the Kent Air Ambulance a fundraising appeal to pay for an air ambulance for Sussex was duly launched at Beachy Head a few days later. The launch used one of the Explorer helicopters obtained from Schreiner in the Netherlands. Now UK registered as G-SASH the MD900 was previously PH-SHF and appeared to have been promoted for Surrey and Sussex EMS operations. That may just be a coincidence; the Explorer is owned by Specialist Aviation Services!

As a press release from the existing operation made clear the paramedics from the Sussex Police and Ambulance Helicopter were already celebrating 15 years of successful joint operations in which the paramedics and police officers run an integrated flight crew. In addition, unlike most UK HEMS operations [and the proposed Kent operation] the joint police and ambulance service in Sussex offers the service county-wide both night and day.

'Since 1990 Paramedics from Sussex Ambulance Service have been full time crewmembers on the Sussex Police and Ambulance Helicopter, providing an Emergency Helicopter Service to the people of East and West Sussex.

The highly trained paramedics in this state of the art helicopter are equipped with the full range of aeromedical lifesaving equipment. They have used it over the years to save countless lives, treating patients at the scene of an incident and, when required, flying them to hospital.

'Strategically based in the heart of the county at Shoreham Airport, most of Sussex can be reached within 10 minutes flying. When a patient requires air evacuation they will never be more than 5 minutes flight time from one of the network of Hospital Landing Sites available to the helicopter.

'In the last 5 years alone, the helicopter paramedics have attended over 1200 incidents and nearly 500 casualties have been flown.

'The service is provided 365 days a year and is one of only two air ambulances in the UK that operates an Emergency Helicopter service by both day and night.

'This joint operation provides very cost effective utilisation of the helicopter and is unique as it does not rely on charitable donations.

'The concept of joint operation is now being exported to Europe, with the emergency services in both The Netherlands and Slovenia looking at the Sussex model to develop their own service.'



FIRE BRAZIL

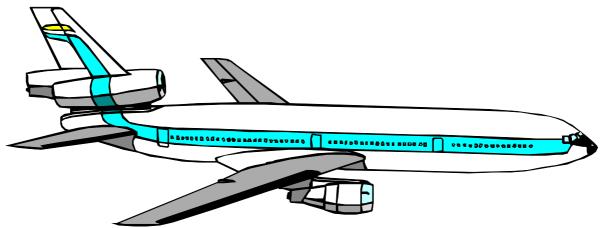
Turbomeca has won an order for Arrius turboshaft engines to equip a fleet of Eurocopter EC135T2 helicopters for Brazil's Corpo de Bombeiros Militar do Distrito Federal. The aircraft will be used for EMS, fire fighting and environmental surveillance. [Flight]

UNITED STATES of AMERICA

Evergreen International, the organisation that is successfully testing a Boeing 747 Jumbo jet in the role of water-bomber has approached Northrop Grumman and General Atomics Aeronautical Systems to discuss plans for developing the UAV in a commercial role. Two years ago Evergreen signed for three Bell HV-911 Eagle Eye tilt rotor UAV's. These are not due for delivery for at least two years.

Currently fires are spotted by light aircraft that precede the water drop aircraft into the fire zone. This activity is hazardous and replacing them with UAV's offers a potential safety bonus. Current thinking is that they might be controlled from the water drop 747 prior to the drop aircraft itself flying in. [Flight]

The Boeing 747 water bomber is barely news today, but another large airframe appeared at the Paris Air Show to widen customer choice. A converted McDonnell Douglas DC-10-10 airliner [not an MD!] dubbed the Super Tanker conducted daily water-drop demonstrations at the show. The conversion is able to drop up to 12,000 US Gallons [45,600 litres].



The former American Airlines aircraft is now owned by 10 Tanker STC and has an Erickson Air-Crane designed tank system fitted by Omni Air International and Cargo Conversions. The tank sits beneath the belly of the airliner, leaving the cabin area free. FAA Certification is due within the month subject to flight test results. [Www]

SEARCH & RESCUE

FLIR Systems, Inc. has received a competitively awarded subcontract from General Dynamics Canada of Ottawa, Ontario, for delivery of the latest generation Star SAFIRE® airborne multisensor imaging systems with multi-year in-service support. The systems will be used for the Canadian Department of National Defence Maritime Helicopter Project. The total subcontract value, including potential option awards, is in excess of \$20M (USD). Deliveries will commence within nine months of contract award and continue until 2009.

General Dynamics Canada has the responsibility, as Integrated Mission Equipment Manager, to integrate the multi-sensor systems into Sikorsky H-92 helicopters (designated as the CH-148 Cyclone by the Canadian Defence Forces).





ISRAEL

Elbit Silver Arrow Systems was showing details of a new maritime patrol version of its Hermes 1500 UAV at the Paris Air Show. It has already flown. The new version has an increased maximum take-off weight and has the capability to loiter for 50 hours using external tanks.

JAPAN

The Coast Guard is evaluating options for a new large helicopter. It is reported that the number of machines affected is low, just two to be used for ship interception to be signed late this year and another four or so of the same type for SAR in a few years. In addition the Coast Guard is seeking to replace a Sikorsky S-76 that crashed – and that is likely to remain with a variant of the S-76. In a longer term replacement programme the replacement for nearly 30 Bell 212s is being sought.

Currently the EH101 is discounted for the large helicopter programme leaving the likely options between the Eurocopter EC225 and the Sikorsky S-92.

Sikorsky has so far failed to make major inroads into the Japanese market, losing the military mine countermeasures contract to the EH101 and a VIP contract to the EC225. The Bell 212 replacement is not likely to be called for until next year of 2007. [Flight]

NORWAY

CHC Helicopter Corp. has won an \$88M contract to provide two search-rescue helicopters for oil projects in the Norwegian North Sea, but warned Wednesday it will lose work piloting crews to drilling rigs when those contracts expire.

The Vancouver-based company said ConocoPhillips Norway has awarded CHC a five-year contract for two upgraded Super Puma MK1 helicopters. The contract, which commences in September, replaces an existing contract for use of two other aircraft.



A new EC135T2 air ambulance for Norway was on display in Paris.

UNITED KINGDOM

UK SAR: Proposals to privatise Cornwall's sea rescue helicopters could lead to lives being lost, the county council has warned.

The Ministry of Defence is considering privatising the county's SAR operation after the Sea King helicopters currently based at RNAS Culdrose, near Helston, are retired from service in 2012. [The Scotsman]

INDUSTRY

The major announcement at the Paris Air Show came from **FLIR Systems, Inc**. The company announced the release of a revolutionary new product for off-the shelf airborne ISR (Intelligence, Surveillance, and Reconnaissance) applications; featuring the industry's first all digital, high definition, stabilised multi-sensor system. Star SAFIRE HD will allow users to see three times more detail, see from farther distances, and analyse situations faster than ever before.

The Star SAFIRE[®] HD[™] offers up to seven payloads including mega-pixel thermal, day, and night sensors with high magnification optics; laser payloads to provide covert illumination, target pointing, and accurate distances; target а fully-integrated IMU/navigation processor to track or determine exact geographic locations and the flexibility to be mounted on a variety of platforms. All of which combines to give the Star SAFIRE[®] HD[™] ISR capabilities at maximum standoff distances.



The Star SAFIRE[®] HD[™] was developed using FLIR's unique CDMQ (Commercially Developed Military Qualified) process. FLIR Systems' unique CDMQ process provides battle hardened products at volume commercial prices.

Ed: FLIR are highly enthusiastic about the product. For them it swings the see-saw of market leader back in their favour in the face of a lengthy period in which Wescam have been grabbing the higher value sales with the MX-15.

For some time matching the high quality capabilities of viewing screens and the images being collected has left a significant gap. The new digital product will push images out that will make fuller use of monitor capability and significantly improve the level of information flowing to the observer.

The product endorsement comes not only from FLIR themselves. The company has been awarded a \$32.8M firm fixed-price contract for the new Star SAFIRE[®] HD^T airborne thermal imaging systems and Star SAFIRE III airborne thermal imaging systems from the US Army's Space and Missile Defense Command in Huntsville, Alabama. The contract includes options to purchase additional units, which are subject to funding availability; the complete contract value is \$61 million.

The units delivered under this contract will support the on-going US Army RAID programme, which provides enhanced perimeter security and force protection for US troops stationed in Afghanistan and Iraq.

FLIR Systems, Inc. also announced the launch of the **SeaFLIR III** long range multi-sensor imaging system at the Paris Air Show. The SeaFLIR III is the next generation in the successful SeaFLIR line of products; inside the compact 9" system is a laser rangefinder, a

choice of mid or large format thermal imager, a daylight and low light TV, and an optional laser pointer.

The SeaFLIR III can be integrated into command and control or fire control systems, and can be installed on a variety of maritime craft, land installations, and fixed or rotary wing aircraft for use in Search and Rescue (SAR) or Intelligence, Surveillance and Reconnaissance (ISR).

The **Titan Corporation**, a leading US national security solutions provider, and defence contractor L-3 Communications have entered into a definitive agreement for L-3 to acquire Titan in an all-cash merger. The total value of the transaction, including L-3's assumption of Titan's debt, is expected to be approximately \$2.65 billion.

Headquartered in San Diego, The Titan Corporation is a leading provider of comprehensive information and communications systems solutions and services to the Department of Defense, intelligence agencies, and other federal government customers.

Sikorsky Aircraft has announced plans to build and test a demonstrator for a new class of coaxial X2 Technology helicopters that maintain or improve on all the vertical flight capabilities of rotorcraft and whose high speed configuration will cruise at 250 knots.

Sikorsky plans to build and fly its X2 Technology demonstrator helicopter at its Schweizer Aircraft subsidiary by the end of 2006. Preliminary design work for the demonstrator is finished and parts fabrication for the aircraft has commenced.



The top cruise speed of helicopters in service today, roughly 150 to 170 knots, are only incrementally better than what they were decades ago due to the fundamental limits of conventional rotor systems. Previous attempts to develop faster helicopters have resulted in degraded hover performance. Likewise, attempts at fixed wing or hybrid vertical lift aircraft have resulted in aircraft with less hover capability than helicopters.

The Sikorsky Aircraft, the Fisheries and Maritime Affairs Department of Xunta de Galicia in Spain celebrated their purchase of two S-76C+ helicopters. Delivery of both aircraft was scheduled for completion in June.

The Xunta de Galicia's search and rescue service provides Coast Guard coverage off northwest Spain. Created in 1990, it was the first of its kind in Spain and the second in Europe. The Xunta's main mission is SAR over sea and land and fisheries surveillance and inspection. Secondary missions include support of emergency medical services, civil protection, security activities and general logistics work.

The service in the past had leased its rescue and maritime patrol helicopters, but selected the S-76C+ on April 2, 2004 as the first owned helicopter.



The **Bell/Agusta** BA609, returned to flight status at Bell Helicopter's XworX research and development facility Arlington Municipal Airport last month. The 1.3-hour flight was the first for the six-to-nine passenger tilt rotor since 2003 as the programmed pause in flight testing was for developmental engineering configuration.

Bell Helicopter has acquired the maintenance and overhaul assets of Ozark, Alabama-based US Helicopter, Inc., a privately-held company providing depot-level maintenance and upgrade installations for a variety of Bell products for the government market. Terms of the transaction were not disclosed.

US Helicopter will be integrated into Bell Helicopter's government support affiliate, Bell Aerospace Services, Inc., which provides logistics and maintenance services.

AgustaWestland marked the handover of the first model 109 Grand ordered by a British customer and celebrated the award of EASA Certification for IFR single pilot operation on 1st June. The ceremony took place in the Finmeccanica static display area during the Paris Air Show at Le Bourget. The Grand still bore its Italian test registration.

Unveiled at Farnborough 2004, the Grand is a new top-of-the-range light twin helicopter developed to meet a wide range of roles, providing the cabin space and payload that until now could only be met by larger more expensive helicopters.



The **Winston Churchill Memorial Trust** is canvassing for applicants to receive a share in a grant pool of £500,000 in 2006.

The WCMT is a living tribute to Sir Winston, whose example is the inspiration. He died in 1965 and many thousands of people, in respect for the man and grateful for his inspired leadership, gave generously to a public subscription to fund Travelling Fellowships. All British Citizens are eligible for the annual awards.

The Fellowships are to enable men and women from all walks of life to acquire knowledge and experience abroad. In the process, they gain a better understanding of the lives and different cultures of people overseas and, on their return, their effectiveness at work and their contribution to the community are enhanced greatly.

Churchill Fellows can be of any age and in any occupation. Everyone has an equal chance; a lack of qualifications is not a bar to an award as every application is judged on the worth of the individual and the merit of the project.

Past award winners have included nurses, artists, scientists, engineers, farmers, conservationists, carers, craft workers, artisans, members of the emergency services – including members of air support seeking a wider understanding of techniques - sportsmen and women. <u>www.wcmt.org.uk</u>

Piaggio rolled out its 100th Avanti propjet in the week before the Paris Air Show. The aircraft was at Le Bourget. The Genoa-based aircraft manufacturer, whose ownership includes the Ferrari family, also announced that from unit number 105 the aircraft will be known as the Avanti II with new avionics, increased cruise speed and more payload capability. The Avanti II is capable of flying over 1,700 nautical miles at up to 450 mph with a 41,000 feet operational ceiling

Piaggio were displaying the 100th example of the Avanti and a new version of the Model 166 at Paris. [ABTN/IPAR]

A Bell 407, converted to a flying demonstrator aircraft for the US Army's Armed Reconnaissance Helicopter program (ARH), has flown at the company's XworX research and development facility at Arlington Municipal Airport.

Bell Helicopter is offering the Bell ARH in the programme to produce 368 new helicopters for the Army to be delivered between fiscal years 2006-2011. The Bell ARH is based on the highly successful commercial Bell 407, in excess of 600 of which are in service with over 1.2M flight hours accrued. The Army is expected to make a much delayed decision on the ARH within the next two months. The Bell faces competition from the Boeing sponsored MD Little Bird.

Smiths Aerospace has been selected to provide its new generation cockpit Voice and Data Recorder Systems to the US Army's 160th Special Operations Aviation Regiment MH-47 Chinook, MH-60 Black Hawk and US Coast Guard HH-60 Jay Hawk and HH-65 Dolphin helicopters. The combined value for the contracts is more than \$4M with deliveries to be

completed this year. The crash survivable recorders are designed and manufactured at Smiths' facility in Michigan.

The US Coast Guard selected Smiths' flight data recorders to be used in their new and upgraded digital cockpit architectures for the HH-60T rotorcraft.

In Paris **Bell Helicopter** Chief Executive Michael Redenbaugh announced that Bell is looking to double its business by 2010 and add new products based on its V-22 Osprey tilt rotor aircraft.

In an interview at the Paris Air Show, Redenbaugh said the company has the potential for double-digit earnings growth in the near term. The V-22 is entering the final stages of Pentagon testing and evaluation, and the US Marines have started a big upgrade of the Bell-made H-1 Huey fleet.

Bell is preparing for more wind-tunnel tests of a quad-engine tilt rotor aircraft. If it goes ahead such an aircraft might be able to lift 25 tons, more than any existing helicopter. [MarketWatch]

Acrohelipro Global Services Inc. a subsidiary of **Vector Aerospace Corporation**, has been awarded the contract to support Canada's Department of National Defence (DND) Sea King Helicopter T58 Engines.

The contract value is estimated at \$5M per year and contains option periods that extend until the end of the service life of Canada's Sea King helicopter fleet. The work consists of Repair & Overhaul, Engineering, and Logistics services.

R&D Design Services Ltd., based in Margate, Kent, have recently been granted Quality Certification: AS 9100 Rev.B, applicable to: Design, manufacture, service and repair of electronic equipment for the aerospace industry, issued by Lloyd's Register Quality Assurance Ltd.

In addition during May the company received two Business Awards from the Thanet District Council. In the category of Thanet Exporter of the Year, and Medium and Large Business. R&D received Highly Commended Awards in recognition of an outstanding contribution to the Economic Prosperity and Employment Opportunities of Thanet.

The Australian government has signed a 1 billion Australian dollar (US\$772M; €638M) contract with European subsidiary Australian Aerospace to provide 12 new NH90 troop transport helicopters for the army. **Australian Aerospace** is a subsidiary of Eurocopter, which in turn is a wholly owned unit of EADS.

The project will have a security aspect in boosting Australia's counterterrorism capabilities by freeing up its current Black Hawk squadron so it can provide support to the military's special forces unit located on the outskirts of Sydney.

The first NH90 helicopter will be delivered in 2007, with all 12 expected to be in service by 2008.

The European aircraft maker **Airbus** announced at the Paris Air Show that it had gained orders and options for 280 aircraft, worth 33.5 billion dollars.

Airbus' claim they will have 51% of the market and intended to keep ahead of its US rival Boeing both in orders and deliveries in the following two years, with at least 360 aircraft deliveries this year and about 400 in 2006.

Meanwhile Boeing announced orders and options for 146 airliners worth 15. 19 billion dollars and is expected to deliver 320 aircraft this year.

On Thursday Airbus announced that it had orders and options for 261 planes, valued at 29.278 billion dollars. That would double the value of Boeing's orders for 146 planes at 15.197 billion dollars. [Xinhua]

A year ago the new Spectrolab Nightsun II was going thorough difficult times. Now Lance Turner the Business Manager for **Spectrolab** has openly thanked operators for sticking with the company in clearing the many reliability issues that surfaced with the searchlights introduction.

Realising the inconvenience that the equipment caused customers the announcement is seen as drawing a line under the majority of the past failures. The good news is that Spectrolab

have managed to come up with temporary fixes to make those existing units useable until a suitable replacement is available. The original gimbal was manufactured by an outside source.

Spectrolab have designed and built their own gimbal that will be available on the new Nightsun II XP due for delivery in the next month or two. This gimbal has been in flight-test for well over a month, with great results. Two more prototypes for environmental testing are due in the lab.

Spectrolab have designed, built, and tested a new light head for this unit that is in the same package as the Nightsun II, but it has the power and reliability of the SX-16 light. The new system will have all of the functionality of the Nightsun II, with the exception of 360 degrees of continuous movement. The new system will have 348 degrees of movement; however the reliability of the power distribution and weather proofing is greatly improved.

Ontario Police Department in California have been testing the set-up with great results. There was one software related issue that was isolated and solved within several hours. The unit went back to Ontario Police on June 20, for further flight testing.

Target dates for first delivery should be within one to two months from now. Please contact Brad Schneider at Ontario Police Air Support for information on the performance of this system. Any questions regarding delivery or product specifications can be directed to Spectrolab's Customer Service Department.

Anyone wanting information on specifications and availability can be directed to Lance Turner, Spectrolab, Inc., +1 818 898 2826.

The Federal Aviation Administration granted type certification to Cessna's Model 525 Citation CJ1+ last month. Certification was awarded in just over 200 flights and 400 flight hours, spanning eleven months.

The **Citation CJ1+** offers more performance, new integrated avionics, enhanced cabin features and expanded standard equipment as compared to the CJ1. The Citation CJ1+ is powered by the new Williams' FJ44-1AP dual-channel FADEC-controlled engine. At 41,000 feet, the CJ1+ can travel more than 20 kts faster than the CJ1. In addition, a 100-pound gross weight increase of the CJ1+ allows it to carry more payload over greater distances. NBAA IFR range with single pilot and three passengers is 1,285 nm. CJ1+ takeoff distance is 3,260 feet and landing distance is 2,590 feet.

Industry continues to develop schemes to counter man portable air defence system [MANPADS] attacks by terrorists. A variety of solutions have so far been proposed but most are based on existing military systems that have very high cost and that alone worries the airline industry. The latest live offerings include extended tubular shields on engine jet pipes – an option likely to seriously affect overall engine economy – and laser based directed infra-red countermeasures [DIRCM]. The extended tailpipe is already flying on a **BAE Systems** Hawk jet-trainer. BAE has announced that DIRCM tests on a commercial Boeing 767-200 will start in August under a \$55M contract with the US Department of Homeland Security.

Meanwhile **Raytheon** has provided an alternative, more economic option available. The lower costs associated with protecting the airport rather than the aircraft appear an attractive option. Faced by a barrage of queries as to whether it might work from DIRCM protagonists Raytheon are promoting Vigilant Eagle a grid of staring arrays to detect, track and potentially distract a MANPADS missile in the vicinity of airports. In equipping just dozens of major hub airports – the most likely targets at just \$25M each it might produce a far cheaper option than equipping every one of thousands of aircraft with their own detection and defence system at a potential cost of \$1M each – if it were to work.



Only a year ago **Reims Aviation Industries** was changing hands and had apparently given up production of complete aircraft in favour of the more lucrative production of parts for other manufacturers. Then came a surprise order for replacement F406 aircraft for Scottish Fisheries.

At this year's Paris Air Show the resurgence was confirmed by a F406 demonstrating the capabilities of the VIP and passenger transport with optional special missions and target towing capabilities in the static park.

Most of the sensor equipment displayed on the Paris airframe radar and FLIR sensor pod - was representative of the possibilities rather than a finite complete aircraft specification.



Aeromega Helicopters has announced the intended closure of its helicopter engineering operation at Stapleford Aerodrome in Essex.

In addition to maintaining its own fleet of Eurocopter, Bell and Robinson helicopters, the company has provided engineering support to various police constabularies most recently Cambridge, Suffolk and Essex.

Mr Edward Kydd, Chairman of the Airtask Group to which Aeromega belongs, said 'the increasing costs of Part 145 regulatory compliance and the improved reliability of modern police helicopters that can be comprehensively supported by the UK distributors, are both factors that have contributed to this regrettable decision. Outsourcing our own fleet engineering requirements has now become the preferred option.'

Aeromega will continue to provide police pilotage to its existing customers and focus its full attention on its AOC operation and pilot training activities at Stapleford and Cambridge.

Airtask's other subsidiary Directflight, based at Cranfield Airport in Bedfordshire, operates a modified BAe 146 Atmospheric Research Aircraft, providing global scientific capability for the Facility of Airborne Atmospheric Measurement and 2 Cessna 406 maritime surveillance aircraft, operating under contract to DEFRA and based at Exeter Airport.



This summer Jakarta-based charter operator PT Travira Air, who undertake air medical flights, will equip its fleet of helicopters and fixed-wing aircraft with Iridium satellite communication systems to be provided by **Sky Connect LLC**.

The Sky Connect TRACKER[™] systems will provide automatic flight following to monitor fleet movements on a 24/7 basis via air-to-ground data links relayed through Iridium's constellation of 66 low-earth-orbiting satellites. PT Travira Air will also use the system for cockpit voice communications when an operational requirement dictates a change in routing or during an emergency. Travira's Singapore-based medical aircraft will utilise the Iridium-based system for vital communications between onboard medical personnel and hospital medical staff.

The customers' fleet serves the oil and gas and mining industries, as well as tourist charters, air ambulance and medical evacuation, and VIP charters. The area of operation includes all of the Indonesian Archipelago and Southeast Asia.

ACCIDENTS

20 May 2005 Eurocopter EC135T2 G-SSXX. Air ambulance. Essex/Bond ASL. The helicopter was attending a road traffic accident at Waltham Abbey and the only suitable landing site was the front garden of a large house. An approach was made to the garden with the LH forward crew door open and the paramedic crew member observing to the rear and below the aircraft. As the helicopter was brought to a hover, the rear crew member reported debris lifting near the house. At that point forward movement was stopped and a tail impact then occurred, although neither crew member was aware of it at the time. The landing continued and after shutdown the fenestron was found scratched. Corresponding traces of paint were found on a nearby fence post. The mission was completed and on return to base a detailed examination revealed no further damage. [CAA]

23 May 2005 Bell 407 N407MJ Air Ambulance. Classic Lifeguard based in Page, Arizona. Helicopter occupied by pilot, flight nurse, paramedic and patient flying from Page, AZ going to Phoenix, AZ. Flight was routine for first 50 minutes. Near Flagstaff, AZ a faint smell of smoke was detected, shortly thereafter a flash was seen at the overhead panel. After which, position lights and all communications went dead. Flight was diverted to Flagstaff airport & precautionary landing was made. Flight crew transported patient by ground to Flagstaff Medical Center. [Concern]

24 May 2005 Eurocopter BK117 N770SL. Air Ambulance operated by ARCH Air Medical Service, Inc [Lifenet Inc.] out of St. Louis, Missouri. The pilot, flying solo, reported no injuries. ARCH 7 was completing a routine transport. After dropping off the Flight Nurse, Flight Paramedic and Patient at Barnes Hospital (St. Louis, MO) the aircraft departed to ARCH base downtown St. Louis for fuel. Approximately 30 seconds away from landing the Pilot got a door light and immediately heard a loud sound which was the left sliding door hitting the main rotor as well as the tail rotor. The Pilot then notified the communications centre that he was going to make a precautionary landing at Downtown Parks Airport. Pilot landed without incident. [Concern]

30 May 2005 Bell 230 N30SV. Air ambulance of Intensive Air/Trauma One based at Sioux Falls, South Dakota. The crew consisting of pilot, flight nurse, flight paramedic and flight RT. Received no injuries. Fifteen minutes after takeoff there was a failure of the bottom main rotor pendulum weight support resulting in the loss of the bottom weight on that main rotor blade. A precautionary landing to an open field by a farm house was made with no further problems. The failed support has been given to the Bell Helicopter Technical Representative to be sent in for further analysis by Bell Helicopter engineers. [Concern]

1 June 2005 Eurocopter AS350B2 N5205F. United States Customs. The helicopter went down at 75th Avenue and McDowell in Phoenix, Arizona.

The helicopter collided with the ground while performing an aerial search. The airline transport pilot sustained serious injuries; the passenger sustained minor injuries. The helicopter sustained substantial damage.

The pilot and passenger were performing patrol operations when the accident occurred. As the pilot descended into the search area he began a shallow, right turn, which placed the helicopter in a downwind position. The helicopter then made about five to six rotations to the left, prior to impact with the ground at an approximate elevation of 4,900 feet mean sea level, on the cactus and desert tree covered terrain. The tail rotor and gearbox were displaced from the helicopter and located approximately 25 feet from the main wreckage. [FAA/NTSB]

8 June 2005 IAI Westwind N639NT. Air ambulance of Air Trek based in Puntagorda Florida. The crew, two pilots, a flight nurse, flight paramedic and a patient were aboard. Aircraft departed from Shannon, Ireland returning stateside when one engine received foreign object damage approx 15 min into flight. The aircraft returned to Shannon, Ireland without incident. Patient admitted to local hospital for approx. 14 hours until arrival of replacement aircraft. [Concern]

16 June 2005. Helicopter. Two people were confirmed dead and nine were still missing after a Peruvian army helicopter monitoring the Colombian border crashed in Peru's remote northern jungle.

Peruvian television reports said a 4-year-old girl and a civilian photographer were killed when the helicopter crashed into the rapids of the Putumayo River, 870 miles (1,400 km) northeast of the capital, Lima. Two deaths are confirmed but nine are still lost, missing.

The cause of the accident is still unknown. There were three civilians in the helicopter: a girl, a woman and a photographer. Army flights are also used to transport people from remote areas. [Media]

17 June 2005 Eurocopter BO105DBS5 N911DD. Air ambulance METRO 1, an Airmed helicopter. After deplaning a patient and whilst returning to base the pilot alone heard a loud pop and made a precautionary landing in a parking lot in Lafayette, Louisiana. [FAA]

FLIGHT SAFETY

According to a recent report pilots and mechanics have been responsible for most of the Border Patrol helicopter crashes investigated by federal transportation officials since 2000.

Crashes have resulted from flight jackets flying out the doors, pilots clipping the sides of cliffs and mechanics not tightening bolts, according to reports from the National Transportation Safety Board.

Five of seven crashes in Arizona, California and Texas investigated since 2000 were the responsibility of Border Patrol pilots or mechanics, the board said.

About \$650,000 worth of helicopters were destroyed.

The cause of the crash of an A-Star helicopter on June 1 has not yet been determined, said Gary Bracken, spokesman for the Air and Marine Division of Customs and Border Protection. NTSB reports allegedly show that carelessness has played a role in most of the crashes.

A Border Patrol pilot in crash last year told investigators that he was tired and eager to finish the last day of a long workweek when he misjudged a manoeuvre and clipped the tail rotor of his helicopter in California.

In a November 2003 crash in Yuma, a drive shaft came loose because mechanics failed to adequately torque a bolt on a coupling of an A-Star helicopter.

But Homeland Security officials note that pilots log hundreds of hours patrolling the border, and when that is accounted for, the accident rate is low. [AP]

LETTERS

Bryn

Only when I opened the bonnet to check the oil did I see your [business] card which had slid out of sight.

We had a very hectic but successful show with a lot of high profile exposure. Our new modular power supplies (PS360) were a great hit and all performed superbly on the Piaggio Raytheon, Bombardier, Gulfstream, EADS, Embraer, ATR and Aermacchi static displays.

Powervamp did all virtually all the static park aircraft and their calculations on Power became the 'bible' for the show authorities in determining the electrical loads at each static display area—I believe we are now a hard act to follow with our knowledge and track record at this event.

Best regards Richard Roller Powervamp.

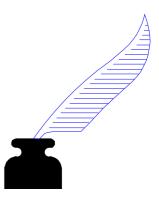
PARIS le Bourget 2005



Getting in among the stars of the show , Powervamp are getting large on the International show front these days. Airbus A380 beyond.

Dear Bryn:

I am in the process of soliciting and compiling information for a 'coffee table' photograph book about airborne law enforcement in America and throughout the world. It would be greatly appreciated if you could include the following information or a portion thereof on your website or in your next newsletter. I have received great response from agencies around the United States but would love to have some international agencies represented in the book as well. And by all means, if you have any photographs, historical or otherwise, and would like to be involved in this project you are more than welcome to submit images, etc.



Thanks for your assistance. Christian Memmott

About the Book

Airborne Law Enforcement is a layman's look the current status of Airborne Law Enforcement in America and the world. A portion of the proceeds will be contributed to the Airborne Law Enforcement Association [ALEA].

If you would like your departments included in this beautiful and informative photo essay please contact the author, Pilot/Deputy Sheriff Christian Memmott.

Interested individuals or agencies should submit a selection of high-quality photos (either digital or hardcopies, with appropriate photographic credit) and a one or two page synopsis of their department's aviation activities including, if possible, a brief dramatic tale of criminal apprehension through law enforcement aviation. Agencies accepted for inclusion will be asked to sign a release form allowing use of the submitted images and will be given an opportunity to proof their entry before the book goes to press.

About The Author

Christian is a Pilot and Deputy Sheriff in Northern California where he flies a variety of fixedwing and rotorcraft aircraft. He is a member of the Airborne Law Enforcement Association and the Nor Cal Airborne Law Enforcement Organization.

He is also a graphic designer. For several years, prior to becoming a law enforcement officer, he owned and operated an award-winning design and marketing firm. Today, he continues to freelance projects.

To reserve your entry in the book or if you have questions, please contact: -

Christian Memmott, 3749 Oro Bangor Highway, Oroville, CA 95966 E-mail <u>clm8100@aol.com</u> +1 530 532 8792

NORWEGIAN Police Aviation

The Norwegian National Police have been pushing for the creation of air support in the country for many years. The prime difficulty has been selling the concept to both politicians and civil servants at the Department of Justice. Although the Royal Ministry of Justice and Police Search and Rescue Division operate the control aspects of the Norwegian SAR system they did not operate their own aircraft. Nonetheless they have full call upon the aircraft fleet of the Air Force and Navy. The hiring of helicopters for security use with the 1994 Winter Olympic Games was brought about by a lack of military capacity. Other than that Norwegian Air Ambulance offer their fleet for law enforcement work but it is an offer not taken up.

In the face of severe opposition from some factions in the Justice Department the police eventually attracted enough positive political pressure to set up a trial at Oslo's main airport in the city centre.

In mid-1997 Norway sent two officers to Sweden to train with them as pilots for an operation commencing in November 1997 [flying from 12/97]. This trial was halted from 30/4/99 when the finance ran out following a call from the Justice-Department with message that the flying should be stopped with immediate effect. The department set to use the time to evaluate the project and present it to the Norwegian Parliament at the first opportunity. As a result of the decision, overnight, the operator Lufttransport A/S was dismissed and each of the crew member's transferred to other duties. The following day the Eurocopter AS350B helicopter [LN-OLG] was on sale for one million dollars.

Although not itself operational Norway joined PACE and took part in its first conference in Amsterdam in 2003. Throughout the period the project had been kept live by Supt. Haakon Gerhardsen and he and his team were planning a new helicopter purchase. Faced with a demanding role specification the police team favoured the Eurocopter EC145 but the delivery timescale and the higher costs resulted in the EC135 being selected.

The Norwegian State Police Air Support Unit was activated later that year, on September 1 with an Eurocopter AS355N LN-OBW owned by Pegasus Helicopter A/S based in the Sundt Air complex on the Oslo's edge of new International Airport at Gardemoen, 50 kilometres north of Oslo.

The first trial helicopter was AS355N LN-OBW. This is no longer used as the AS350 is favoured as more flexible.



The architects of the new police unit realised that if an air unit were to be launched within the next few years a contractor would have to take care of the operational core. The police simply had no certificates or permits and needed to familiarise themselves with a jungle of aviation regulations before striking off on their own. A hiring process was commenced and five helicopter companies competed for the NOK 20M [£1.8M] million-a-year-contract.

Pegasus, the winners, is one of the largest companies in the Oslo district and offers a wide range of services with its fleet of a Long Ranger and AS350B3/AS355N helicopters. Normal operations include sling load operations and air taxi flights throughout southern Norway. The contract includes police pilot training and adequate airframe back-up. Currently training and

back-up are undertaken on AS350s. All back-up helicopters are in Pegasus marks but one should be painted in a police scheme shortly. It will be used exclusively for police training and engineering back-up.

The civilian pilot, hired by Pegasus, is accompanied by a crew of two policemen; one operator and one HEMS-crewman. This is slightly different from many other police air units. The helicopter is strictly an airborne surveillance, command and control centre, not a utility helicopter. Although delivered with additional utility seats these have been removed and the aircraft is currently operated strictly in a four-seat layout with two standard EC seats forward and two swivelling Martin-Baker seats side by side in the rear cabin. The rear seat positions have two large multi-role R&D Design Services LCD-displays in front of them as well as a wide range of communication tools and handling devices.



Martin Baker seats

R&D Design Services 15" LCD1502-300 monitors

When operating with the standard operational complement three crew, pilot training considerations tend to require that one addition is carried - two pilots occupy the front seats.

Although the EC135 on high skids is not available with pop out emergency floatation devices the operation does not shirk from overflying the sea out to a significant distance.

Having been moved out of the original airport for Oslo to the new one at Gardemoen was not a good decision. It was no secret that the new airport was beset by poor visibility problems. The old airport was in the centre of the city which is why it was relatively easy to exert pressure to close it for future use as high value building land. Its demolition was reported as swift and comprehensive.

During the early part of 2005 the EC135T2 aircraft was displaying availability times around 50%. It is only after study that it becomes clear that the criteria employed are different to other published figures. The negative availability model relates to weather as well as mechanical issues. Overall mechanical availability in Norway closely reflects published UK Police experience in regularly demonstrating mechanical availability in excess of 95%.

Based at Gardemoen Airport, increased transit times to the Oslo crime spots from barely 5 minutes to around 20 minutes flight time. Nominally in support of Oslo its proximity to the area naturally results in Gardemoen receiving the best service. The helicopter is on 5 minute response in day-time and 15 minutes at night. When possible the crew sleep at the unit during the night and are provided with comfortable rooms.



The Nitesun II has been trouble-free since delivery

Wescam's SX-15 turret has met all expectations

The contract with Pegasus Helicopter A/S is valid for five years and the annual flight time is currently expected to be 800-1000 hours a year, which are split on roughly 200-300 missions. The police hope to have put together enough experience and knowledge by the end of this period to be able to establish a flight institution of their own. A vast advantage having a contractor like Pegasus is that it considerable reduces the police organisation as the contractor holds its own staff and technical establishment.

Irrespective whether the police will be able to initiate its own air unit after five years or not Pegasus will certainly play an important role in the further development of the rising Norwegian police aviation.

Much remains fluid. No exact dates have been set but the existing EC135 will be purchased from Pegasus in around four years time. Depending upon analysis of their on-going operational experiment there should be expansion across Norway using yet to be identified helicopter types potentially flown by police trained sworn officers. Such a development will require the identification of new bases – including a replacement for Gardemoen. The summer months – offering virtually 24 daylight throughout the country – present a relatively docile flying environment. The stark contrast of a winter with unremitting darkness and potentially severe weather will tax all but the most experienced of pilots. The unit spent part of its first dark period training for the use of Night Vision Goggles [NVG's] but that is currently suspended pending the return of winter darkness.

With just one operational helicopter available there remain a few question marks about pilots in training accruing enough flight hours to be truly experienced. The aircraft is SPIFR capable but it is invariably flying two pilot in order to provide second pilot experience for fledgling police pilots. That may yet prove to be too expensive an option to continue in an industry capable of offering a reasonable supply of pre-trained experienced commercial pilots.

PARIS ADDENDUM

By Dino Marcellino



PAN image

At the recent Paris Air Show of Le Bourget Piaggio Aero Industries presented the P-166 DP1 – the subject of some exclusive pictures in an earlier edition of PAN.

The 'new' maritime patrol aircraft, in fact a mid-life updating programme from the DL-3 version, developed for the Guardia di Finanza Air Service has reached optimum performances in terms of power, endurance and efficiency such to satisfy the customer requirements.

At Le Bourget some other Mediterranean area operators have shown interest in the programme.

During an earlier visit to the Piaggio factory in Genoa during April it was possible see the two DP1 in grey GdF livery at final assembly stage, and some DL3 in gaudy red and white Coast Guard colours, and the less showy Air Force livery.



Dino Marcellino

Thirty of them are still on the line for the Air Force (6), Coast Guard (14) and Guardia di Finanza (10). A project to convert some or all of these to the new P166.DP1 standard has commenced with the two GdF examples drawn from the line.

Police Aviation News

July 2005



The P180 Avanti has finally attracted success, after a slow start sales now stand at 160 units, of which 90 have been delivered (45 in USA, 44 in Europe and 1 in South America). Planned production for 2005 is 21 planes, rising to 26 in 2006.



Dino Marcellino

Piaggio Aero Industries has more than 1,360 employees, two main factories in Genoa (Headquarters) and Finale Ligure both in Liguria Region, and branches in Naples, West Palm Beach (Piaggio America Inc.), Nice (France).

PEOPLE

Alan Perrin is the new Sales and Marketing Manager at Skyforce, replacing John Prior.

Alan is directly responsible for promotion of Observer and other Honeywell, Bendix King avionics product.

Prior to joining Skyforce, Alan originally qualified as an aviation engineer with a commercial airline before moving into the computing industry but most recently spent 8 years in the electronics distribution and manufacturing industry specializing in LCD technology and ruggedised monitors.

Alan can be reached at the Skyforce Boxgrove facility on 01243 783763 or mail <u>alan@skyforce.co.uk</u>

FORTHCOMING EVENTS

Registration for the DSEi (Defence Systems and Equipment International) 2005 exhibition at ExCel, Docklands, London has now opened.

The organisers Spearhead Exhibitions Ltd of Oriel House, The Quadrant Richmond TW9 1DL, UK Tel: +44 20 8439 8888, fax +44 20 8439 8889 Email:

<u>enquiries@dsei.co.uk</u> are promoting their showcase for new and future defence technology and is the largest exhibition for the world's defence companies to display their land, sea and air capabilities at a single exhibition. The event includes a significant [airborne] law enforcement element – albeit at the militaristic end of the spectrum.

DIARY

12 - 13 July 2005, Heli-Pacific, Hyatt Regency Coolum, Queensland, Australia. The only civil and military helicopter event for Australasia. Shephard's inaugural Heli-Pacific conference and exhibition will address the crucial issues confronting both the military and civil users of helicopters in Australasia. <u>http://www.shephard.co.uk/Events.aspx</u>



20-23 July, 2005 ALEA 35th Annual Conference and Exposition

Reno Sparks Convention Center S Virginia Street, Reno.

Contact Sherry Hadley +1 918 599 0705 fax 583 2353 execdirector@alea.org

June 30th was the deadline for Early Registration discounts but you can still <u>Register online</u> via the <u>www.alea.org</u> website.

Pre-Conference Classes Still Open

The <u>Aircraft Accident Investigation Class</u> still has slots available and is scheduled for Monday, July 18 - Wednesday July 20. The Unit Manager's Course is filled but the <u>Aviation Safety</u> <u>Manager's Course</u> is still available.

Need to <u>renew your CFI</u>? Leo Bell makes this session valuable and enjoyable. Sign up now for this Monday and Tuesday class and you still have time for the <u>golf outing</u> on Wednesday!

Wednesday Night Sneak Preview on Expo Floor at 5:00 PM

We are going to give you a chance to win cold cash with our Poker Run at our <u>Wednesday</u> <u>Night Sneak Preview</u> but you have to be there to play. Just think...extra money to put in the slot machines!

LATE ADDITION!!!

Honeywell have announced a late addition to the show. UK based Skyforce, a Honeywell, Inc. subsidiary, will be exhibiting at the ALEA exhibition and conference in Nevada partnering the parent company on Booth 433. They will be demonstrating the excellent Observer system as a stand alone and in parallel with the KMD850 MFD. Honeywell will be demonstrating their Helio EGPWS at the show.

SUBMIT ITEMS FOR PAN by the 23rd of the month before publication to E-mail <u>Editor</u> or <u>Police Aviation</u> HOW TO SUBSCRIBE (OR UNSUBSCRIBE)

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