©Police Aviation Research

Number 142 February 2008

IPAR

HAI Heli-Expo Preview

11

February 2008

PAN – <u>POLICE AVIATION NEWS</u> is published monthly by INTERNATIONAL POLICE AVIATION RESEARCH 7 Windmill Close, Honey Lane, Waltham Abbey, Essex EN9 3BQ UK **Main:** +44 1992 714162 **Cell:** +44 7778 296650 **Skype:** Bryn.Elliott Bryn Elliott **E-mail:** <u>editor@policeaviationnews.com</u>

Bob Crowe Digital Downlink L3 Wescam Innovative Downlink Solutions Power in a box Imaging Surveillance Technology Turning the blades Airborne Law Enforcement Association European Law Enforcement Association Sindacato Personale Aeronavigante Della Polizia www.bobcroweaircraft.com www.bms-inc.com www.wescam.com www.mrcsecurity.com www.powervamp.com www.powervamp.com www.rdds.co.uk www.turbomeca.com www.alea.org www.pacenet.info www.uppolizia.it

LAW ENFORCEMENT

CHINA

MAINLAND: A little over six months prior to the Beijing Olympic Games there are signs that free access to the air, probably the main stumbling block to law enforcement air operations, remains pretty much unresolved.

Foreign consultants continue to be invited to China to speak on air operations but there have been no reports back to suggest that the current bars on free flight have been lifted. Under the current regime there is a requirement that before any flight takes place the police must make a request to an army General to fly. This situation might alter at any time but it appears that the recently trained crews who will be operating some very high technology aircraft types [primarily the Agusta A109E and EC135] are going to have precious little 'free flight' experience in an area of China that has only recently shut down large sections of in-



dustry to reduce the effects of severe pollution – a factor still potentially inducing severe VMC conditions for some time to come.

HONG KONG: The Special Administrative Region of Hong Kong Government Flying Service is seeking to hire pilots under 3-year renewable contracts for its Jetstream 41 aircraft from industry.

Flight International, industry's favoured advertising medium, has been carrying a series of half and full page adverts for a Training Captain and a Captain for their twin-engine maritime patrol aircraft B-HRT and B-HRU. The pair has been in service for 9 years. [FI]



GERMANY

FEDERAL: In the last issue PAN carried news of the retirement of the Alouette II from service and included an overview of current operations and plans for the Federal Police air operations.

In the wake of the article the head of the operation, Gunter Carloff, has requested that a couple of points be clarified.

In the section on the training of the flight technicians it was erroneously stated that these front seat tactical crew members are introduced to pilot training to a standard that would enable them to fly the helicopters back

to base in an emergency. It now emerges that this training does not include any degree of 'hands on' flying and that officially the return to base com-



ment is not therefore valid. The Federal Police have been leading users of Night Vision Goggles for some years and current policy is that all crews are to be proficient in the use of this equipment. This was not clear in last month's edition. Where the confusion arose was that it was not made clear that new trainees are initially sent to operational duties without this training and then recalled at a later date to enhance their capability and bring them up to the standard of their peers.

The editor hopes that these errors have not unduly misled readers.

IRELAND

GARDA: The Garda Siochána Air Support Unit's second Eurocopter EC135T2 helicopter was officially unveiled last month during a ceremony led by the Minister for Justice Brian Lenihan and the Commissioner Fachtna Murphy at Garda Headquarters in Dublin.

X

Coolspool 260

oolspool 260

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 Ltd, Weston-Super-Mare, England WWW.powervamp.com

POWA



Colspool 17

4

The Garda Air Support Unit was set up with an AS355N and a Britten-Norman BN-2T in 1997, since that time the first EC135T2 has been added. The new helicopter, delivered to Ireland late last year, will replace the AS355N. According to the Garda the operation contributed to 1,300 arrests over three years. Some 14 people were located in search-and-rescue missions by the unit in 2007.

JAPAN

OSAKA: A vehicle pursuit undertaken last month in Japan appears to have broken all records for such events by virtue of the number of police vehicles it attracted as a tail.

The authorities in Osaka were involved in the historic police chase after 27-year-old Hirofumi Fukuda who was wanted for assault on police.

The two hour chase of his vehicle commenced at about 11am after Fakuda was reported to be recklessly driving. Some 460 squad cars, 2,240 cops and a helicopter were involved.

The whole parade was finally brought to a conclusion when he hit a bridge column and was slightly injured. [Japan Today]

NETHERLANDS

The eight new helicopter orders announced by the Netherlands National Police Agency (KLPD) in recent weeks, six Eurocopter EC135P2+ and two AgustaWestland AW139, were purchased with assistance from the Nederland's National Aerospace Laboratory (NLR).

The NLR assisted the KLPD with the purchase of these eight helicopters over the past two years to bring to an end a long standing requirement to replace BO105 helicopters and the long departed BN-2 fixed wing.

Two NLR helicopter experts assisted the KLPD in defining the requirements to be met by the new police helicopters. In addition, they were full members of the team responsible for examining the proposals received from the manufacturers to ensure that they complied with the requirements. They were also involved in the testing of the helicopters while in flight and on the ground.



It was in 2001, that MD Helicopters announced at Heli-Expo, Anaheim CA, that the Dutch Police had chosen the MD Explorer as the helicopter type to replace their Eurocopter BO105 and BN-2 fleet, contracts were signed for eight aircraft, with the first delivery in November 2001.

The contract included a weight requirement which Eurocopter had declined to meet but that MD was confident was achievable. In the event they were destined never to reach the numbers within the contract time limits, despite a number of extensions. The KLPD finally cancelled the contract in 2005 and bought in some additional BO105's to take their fleet to seven.

The two AW139s will be delivered at the end of 2009. This type of helicopter is larger than the EC135, accommodating up to fifteen passengers and is officially stated to be used for transporting and dropping 'intervention teams.' More importantly they will also undertake the heavy lift task that led to the demise of the contract with MDHI for Explorer helicopters.

The KLPD need was a 'high end' mission to carry heavy 'special' equipment formerly carried by the BN-2 fixed wing. Although it was in many ways a unique and relatively little used mission it was critical to the whole contract. The customer sought to change its operations to a single type on the grounds of economy and approached industry at large with its requirement. Each of the other said it was not possible [at that time] but MD declared that this was possible. As a result, and not without some internal recrimination, fixed wing aircraft were sold off and pilots either told to retrain to helicopters or leave pending arrival of the MD helicopter.

The long gap between the departure of the BN-2 fleet and the yet to be realised arrival of new helicopters has resulted in fixed wing aircraft being leased in from a commercial source to undertake the task.

After it became clear that the required specification was not going to be delivered to the original schedule MD sent early model MD900 demonstrator's to Holland to assist the KLPD with initial familiarization training. Two different Explorer's were operating with them N9201U in service by February 2002 and N9213Q from May 2002 until early 2005. Today continued monitoring of the situation confirms that the remaining loan aircraft (N9201U) is still locked in a police hangar on the east side of Amsterdam's Schiphol Airport in the Netherlands. Sources suggest that the aircraft – still FAA registered to MD – remains as a tangible 'hostage' to the return of any outstanding financial interests the KLPD has in the defunct Explorer contract. N9201U was the craft involved in the Round the World speed attempt foiled by the airspace closures in September 2001.







Complete Air to Ground Microwave Systems to Suit your Needs

The Downlink Experts

Tel: +1-858-391-3050 • Fax: +1-858-391-3049 Email • dept500@bms-inc.com • Broadcast Microwave Services

THE NEXT GENERATION OF SECURITY ...

- Airborne Video Downlinks
- Central Command
- Disaster Recovery
- GPS Tracking
- Ground Surveillance
- Port & Border Patrol
- SATCOM



Visit our new web site at ... WWW.Mrcsecurity.com

UNITED KINGDOM

GENERAL: The latest round of Home Office funding releases has now received the Ministerial blessing.

There are no real surprises in the list with Devon & Cornwall and Greater Manchester receiving funding for their Eurocopter EC145 and MD900 Explorer respectively.

The decision and funding for the replacement aircraft for the Eurocopter EC135T1 'Classic' aircraft has been made. The preferred bidder and the losers in the industry were notified last month but there is still some distance to go as the final specification for these five air-frames is to be identical and agreed by all operators.

Beyond airframes there are a couple of operators being funded for new FSI sensor pods. More details next month.

NORTHUMBERLAND: The continued rise in the presence of the small UAV is affecting all parts of the country and the latest crop of stories relating to these flying closed circuit televisions relates to a crackdown on the theft of cable from railways in the north east of England. The recent growth is the price of scrap metal has greatly increased the theft of all classes of metal from lead in church roofs to 'live' wires on the transport infrastructure.

British Transport Police will target thieves using a MW marketed Microdrone – the small UAV with four electric driven rotors from Germany.

The equipment will be trialled to see whether it will allow BTP to police more sections of the rail network in addition to regular patrols and other tactics they adopt to disrupt cable thieves. Its range of some 500metres from the operator, and limited flight time will undoubtedly preclude any form of spontaneous visual observation but the trials are of course about working out what they are capable of.

BTP do not have their own helicopter but do have access to full size helicopters on contract and the use of a helicopter normally used for engineering surveys when it is available. **SCOTLAND:** In another UAV related story The Scotsman newspaper reported that police had abandoned tests on a new Cyberflight fixed wing small UAV in rural Argyll after it crash-landed whilst undertaking trials with the craft as an aid to mountain and marine searches.. Strathclyde Police were quickly defending the craft.

The trial period was three months in Argyll from the beginning of November but the media noticed that it was absent during a nine-hour hill search for two climbers near Bridge of Orchy on December 26th and hyped up the story surrounding its absence.

Inspector Neil Wallace of Oban police reportedly confirmed that the tests had temporarily been grounded because the prototype device was 'not reliable.' Later reports had the Strathclyde Police refuting the claims made in several newspapers that they were forced to

suspend operation of their UAV after a crash.

Inspector Ian Andrew at the Strathclyde Police Corporate Planning and Development Research and Evaluation unit confirmed that there had been a small technical issue with the aircraft, but that there had been no crash and neither had operations been suspended.

The problem with the craft related to water ingress into the electrics during rainy weather whilst the craft was being assembled. Once it was assembled there was no problem. The issue has now been resolved by the manufacturer. Other issues – including the preferred launch method, moved from hand-launch to ramp launch, were just the sort of evolution



that the evaluation was designed to bring about. [UAV on-line/IPAR]

Last year Cyberflight and US partners Procerus Technologies broke UK records with their flying demonstrations, leading to what the company has termed 'a resounding success' and overwhelming interest in their UAVs. A demonstration team flew four aircraft at the annual Parc Aberporth UAV meet in Wales last July.

Procerus Technologies have been working closely with Cyberflight to provide highly advanced autopilot software for the UAV range.

Current operations with Strathclyde are the only ones being undertaken in the police sphere. It was feared that getting involved with too many potential customers at the same time during these early stages would involve contradictory operational requirements and so dilute the company's ability to respond. Operations in the demanding Oban area of western Scotland expose the craft to some of the worst conditions in the UK – winds in excess of 35mph are regularly encountered. If the craft survives Oban it should work well in other areas. [SP/C]

STAFFORDSHIRE: After the highly publicised use of a UAV at the V Festival event last year the Staffordshire Police have purchased a rival German product, AirRobot being represented in the UK by Rotorcams. They are the first constabulary in the UK to actually buy a machine. Merseyside Police and others are only undertaking trials of the various craft on offer at the moment.

A number of forces continue to express and demonstrate interest in a variety of small UAV craft and these include Dorset, Essex and Sussex as well as a number of fire services and the military. More orders are predicted.

Generally this type of craft is perceived as an extension of Closed Circuit TV security cameras and the uses are currently very much in that category.

The CAA continues to be 'hands-off' with these small [under 7kg/15lbs] UAV craft and the only time they might step in is if there were allegations of some danger being caused. Hands off or not in practice they continue to talk with the police undertaking these trials [and

February 2008

purchases], advising where asked and a recent enquiry to the CAA suggests they are all talking to each other.

Recently Rotorcams flew the AirRobot in winds that were gusting 35mph in front of high ranking officers at Staffordshire Police. It was all about proving that the AirRobot is the only UAV in its class that can fly above the 12mph wind speeds that are typical of most units in the market sector. The demonstration proved that AirRobot is quite capable of stable and controlled flight in wind speeds above 25mph.

SOUTH & EAST WALES: Plans to move the police helicopter from its isolated industrial home in the south of Cardiff to the edge of a quiet rural village have led to local expressions of displeasure.

At the end of the current contract with Veritair the South and East Wales Air Support Unit serving the South Wales and Gwent police forces is due to leave its current heliport home in Cardiff Docks and move to the Ministry of Defence St Athan site in the Vale of





RDDS

Mission Critical R&D Design Services Ltd Star Lane, Margate, Kent, CT9 4ED • Registered in England: 03414444

8

Glamorgan under a new Bond Air Services Ltd., [BASL] contract.

Local people have long accepted the major military site on their doorsteps but they are less happy about the police operation bringing in a 24/7 operation. According to the police they have been in discussions with Cardiff Wales Airport and taking advice on the optimum flight paths which will avoid flying over residential areas surrounding their new home.

BASL continues in discussion with the Welsh Assembly Government, which owns the land at St Athan, in an attempt to secure full access to the site and fulfil its contract. The police aviation development at St Athan will be a new hangar, landing pad and hard standing and alterations to the existing offices. The operation will give up its existing AS355F2 G-SEWP and move across to a new Eurocopter EC135T2 G-WONN currently being prepared for service with Eurocopter UK. [Western Mail/IPAR]

UNITED STATES

ALABAMA: It looks certain that Coffee County Sheriff's Office is set to acquire a DoD surplus helicopter – probably a Bell OH-58 Kiowa in the next few months. Coffee County currently relies on air assistance from neighbouring agencies - the department called in the Dale County Sheriff's Department's helicopter at least nine times last year.

Last September the Coffee County commissioners shot down a proposal to acquire a patrol helicopter, but last month they reversed the decision on a slender 4-3 vote and are now awaiting a machine.

It's clearly a project on the cheap though, there is the free machine but the money for its preparation for service has been glossed over, not mentioned in any news stories, and it appears has yet to be assigned. It looks as if it might be covered through general fund raising—not usually enough to support any potentially expensive aircraft project. Both engineering and pilotage are to be reliant upon 'volunteers based at Fort Rucker' – not perhaps a good business model under any circumstances. [Ledger/IPAR]

CALIFORNIA: The Sonoma County law enforcement helicopter 'Henry 1' is to continue flying under new arrangements that will see the helicopter operation return from a commercial lease to an owned machine.

In operation for nearly 40 years, the unit has a history of facing close down whenever budgetary or safety problems arise. Hitherto it has been saved thanks to its political popularity in making headline catching rescues in rugged, hard-to-reach areas along the coast and in the mountains.

Despite a recent recommendation to scrap the helicopter the latest round of anti-helicopter politicising appears to be leaning towards laying off deputies and department administrators and scrapping a police dog unit to balance the budget.

In a 10-year period ending in 2001, the helicopter participated in 3,600 law enforcement missions, 1,100 SAR flights, 1,300 EMS trips and 50 fire suppression missions. During an average year, Henry One responds to 450 calls for law enforcement assistance such as searches, 55 medical calls to transport patients and 130 search and rescue operations. The helicopter squad includes a sergeant, deputy, two pilots and eight part-time paramedics.

The current helicopter used as 'Henry 1' is a Bell 407 N108SD that replaced a LongRanger N125RP some years ago.

The helicopter was to be grounded as of February 1 if sheriff's officials and county administrators couldn't work out details of how to keep Henry One aloft. The county operated the helicopter from 1974 to 1983 until two fatal accidents and maintenance trouble with a county-owned chopper prompted officials to turn to private companies.

Aviations Specialties Unlimited, the current helicopter service contractor, told the county in July that it was having too much trouble recruiting and retaining pilots. It was the fifth in a series of private helicopter service contractors that have operated the service in Sonoma. They are joining their predecessors in terminating their contracts early.

Under the new arrangement, the county will buy the helicopter for about \$1.9M and hire pi-



lots and paramedics to staff it. Research showed that of the other 26 law enforcement helicopters in California turned up none that used private company contracts. It was expected that the new arrangement would save just \$23,000 on the \$1.35M the county spent on air support this year. [Press Democrat]

CALIFORNIA: The air unit of the Monterey County Sheriff's Office [MCSO] based in Salinas was declared operational last month.

The project dates back to November 2004 when Sergeant Denis Greathead of MCSO was tasked with putting together a proposal for starting an air unit. The original plan was to seek funding to lease a twin turbine helicopter to perform LEA, SAR, EMS and Fire Suppression. From the beginning getting a twin was a bit of a pipe dream but there was a need to get a helicopter. In the end they managed to obtain two helicopters.

In August last year the County of Monterey (CA) released a Request for Proposal (RFP) for Helicopter Services for the Sheriff's Office using a Robinson R44. That all came together at the end of November when they were able to show off their R44 that was to be at the centre of their Sheriff's Tactical Airborne Response (STAR) operation.

As finally put together the operation entered the New Year with two helicopters available for use operating out of Salinas Airport. The call signs for the two helicopters will be *STAR 1* (Robinson R44 N831H/ c/n 11791primary helicopter) and *STAR 2* [Verticare's Bell 206B JetRanger N3181J/ c/n 3771] available for use simultaneously or as a backup helicopter.

Monterey County is the only Sheriff's Office in the state using the Robinson R-44 helicopter. Three other cities in California also use the R-44; Fontana, El Monte and San Bernardino. The primary mission of the helicopter will be to support Sheriff's Office Patrol Operations. Secondary missions include Training Missions, Supporting Sheriff's Office Specialized Units such as SWAT, County of Monterey Marijuana Eradication Team (COMMET), Sheriff's Narcotics, Monterey County Joint Gang Task Force (GTF), Search and Rescue, Special Events, Transportation, Support to Allied Agencies, etc. [Media/MCSO]

KANSAS: Although the council in Topeka recently approved the purchase of a Robinson R-44 at a cost of about \$820,000 there are continued representations that caution against the purchase and a new proposal that a small UAV is acquired instead. The operation already uses an R44 N422PD.

Shawnee County District Attorney Robert Hecht has made a move to stop the purchase of a new police helicopter for Topeka and has advised two companies [Municipal Services Group, Colorado and Schrieb Air, Augusta] to return more than \$70,000 they've already received from the city for the helicopter.

He says that the decision to buy was invalid because it was done without the mayor's approval. If the money is not returned, the DA says court action could be necessary.

OKLAHOMA: Decatur, Texas based United Rotorcraft Solutions (URS) has been awarded the completions bid for the Tulsa Police Department's new Bell 206L4 Lon-



gRanger.

The completion will include avionics, special mission equipment, airframe options and paint. Some of the equipment URS will install includes the Garmin GNS 530 GPS/Comm/Nav and GTX 330 transponder, NAT audio panels, provisions for the FLIR 8500 and the Spectrolab SX16, three Paravion Diamondback Monitors and the Onboard System Cargo Hook. The aircraft will also receive wire strike protection; bleed air heat and air conditioning.

The Tulsa PD aviation unit began in 1981 with a Hughes 300. This new 206L4 will be the second LongRanger added to the fleet. This is the replacement for their recently sold MD500E.

The helicopter was expected at the United Rotorcraft facility last month with a scheduled delivery sometime in early May. [URS]

AIR AMBULANCE

CANADA

QUEBEC: The Quebec government is setting aside some \$40M to buy two new fixedwing air ambulances. The chosen type is not yet frozen but is in the class of the locally built Challenger 300. It will replace an ageing Challenger 601 air ambulance at the end of its useful life in two years.

It has been stated that the pair should represent better value than the current aircraft thanks to lower maintenance and ownership costs.

The contract for the pair of aircraft – one configured as an air ambulance and the other as a hospital plane is currently out to bid. The government will seek bidders and whilst not specifying a locally produced airframe it will set a required level of Canadian content.

The government will sell the Challenger 601 and a Dash 8, made by Bombardier's De Havilland Aircraft of Canada Ltd. subsidiary, but will keep its Challenger 600, used by the premier and as a backup to the Challenger 601 air ambulance. [Gazette]

NORWAY

Tromsoe-based independent airline Lufttransport AS has signed contracts for the purchase of eleven new fixed wing aircraft and four new helicopters, worth together \$99M.

The planes will be delivered by Hawker Beechcraft from the first half of 2009, while the helicopters produced by AgustaWestland are to enter service this year. The operator already includes types produced by these manufacturers in its fleet.

The expansion is due to new contracts with the Norwegian State Air Ambulance and the Coastal Piloting Service. [Aftenposten]

SAUDI ARABIA

RED CRESCENT: In spite of losing one of its two BO105 helicopters in a fatal accident one year ago the Saudi Red Crescent Society has announced plans to expand its air ambulance services to cover every area within the kingdom through Prince Faisal bin Abdullah, president of the Society.

The Red Crescent has signed an agreement with the European Aero-Medical Institute to conduct a study on the prospects of implementing air ambulance services throughout the kingdom. Meanwhile Red Crescent officials were holding talks with the Ministry of Finance to purchase well-equipped air ambulances. No manufacturer has been selected. [Kaleej Times]. *Ed: They acquired two BO105 helicopters late in 2006 and shortly after it entered service in January 2007 one of them was involved in a fatal crash. It is said that the latest proposal will see the acquisition of fifteen new helicopters.*



Potentially proving that old aircraft do not have to have their useful lives brought to an end my misfortune Tim Badham has sent in this image of the Warwickshire & Northamptonshire Air Ambulance fundraising shell. In the past it was old Bolkow helicopters that undertook the task of fundraising but Agusta Power operator Warks & Northants have a truly representative shell for marketing their operation.

Seen last year Turweston the origins of the shell appear to be the remains of 2003 Agusta 109E Power G-HIMJ that came to grief early in 2004 in Leeds, Yorkshire after suffering a tail rotor failure. It was de-registered after just 15 months in service.

UNITED KINGDOM

KENT, SURREY & SUSSEX: The air ambulance is asking the general public what they think about the Helicopter Emergency Medical Service. Nearly 2,000 glossy brochures will land on the desks of politicians, health commissioners and hospital leaders, as well as the charity's 170 volunteers, Kent Air Ambulance Trust asking for their opinions on how the charity is performing.



The Strategic Review update has been sponsored by Dunsfold Park. With

vivid photographs and simple facts, it charts the progress of the charity over the past three years, from being a traditional air ambulance service (simply an ambulance that flies) to a cutting edge, internationally acclaimed pre-hospital care service, operating over 6,500 square miles and serving a population of 4.2 million people, with its two state of the art helicopters.

The HEMS was established in 1989, and is leading the way in pre-hospital critical care. Kent was the first Air Ambulance in England and Wales to switch from flying with a paramedic crew, to a specialist doctor and critical care paramedic, and last year opened a new base and launched a second helicopter to cover the neighbouring counties of Surrey and Sussex.

Looking forward, the Strategic document considers whether the charity should now focus on organ transplant transport and critical care patient transfers at night, something currently not undertaken in the UK. The question has been asked before but so far the time has yet to be considered appropriate.

Speaking on behalf of the charity, Chief Executive David Philpott said:

"We are enormously proud of what we have achieved as an independent charity. This would not have been possible without the millions of pounds that ordinary people donate every year to keep our lifesavers airborne. It therefore seems appropriate to us, to ask the people who fund and use our service, what they think we ought to be doing in the future."

A copy of the Strategic Review is downloadable from each of the charity's three websites

www.kentairambulance.co.uk www.surreyairambulance.co.uk www.sussexairambulance.co.uk **YORKSHIRE:** In a marked change in heir stated priorities air ambulance bosses have put on hold plans for a new a new headquarters at Tockwith, near York, plus a satellite base at Malton.

The charity's director of fundraising has announced that funding is now to be prioritised towards servicing the £3.6M in loans taken out to buy its two MD900 helicopters.

The charity will look again at building the air support facilities in the future if it continues to believe it will improve the service for patients.

SEARCH AND RESCUE

AUSTRALIA

In the wake of reports that the new Dornier 328-100 aircraft chosen for Australia's new \$200M maritime SAR fleet have suffered severe maintenance issues critics have been checking out the types background. Critics have been highlighting a total of sixty-nine airworthiness safety alerts since the 328 started operating - far more than the number of alerts for equivalent types of aircraft.

Airworthiness directives issued by Australia's CASA since late 2005 have included warnings about possible corrosion of landing gear components and fuel leaks. But CASA does not see this as a safety issue.

The high number of reports for the 328 contrasts with just three directives issued for such as the Spanish-built CASA C-212 turboprop, one for the Fokker F27 and six for the Saab SF340.

The SAR configured Dornier 328's are the only ones in use in Australia. The type is now out of production since Dornier went out of business and various plans to return the type to production failed. The operator, AeroRescue Pty Ltd under contract to AMSA, was finding it difficult to source spares and a number of high profile incidents where they were unable to respond have highlighted the situation.

The last five Dornier's based in Melbourne, Brisbane, Cairns, Perth and Darwin were made in the mid-1990s and purchased second-hand, finally entering service in February 2007. [The Australian]

CANADA

The long-awaited arrival of new military helicopters to replace Canada's worn-out 1960's vintage Sea King fleet has been delayed by as many as three years.

The fleet was due to be phased out from late this year with the arrival of new CH 148 Cyclone helicopters, designed to be flown off the decks of the navy's warships. Now it has been revealed that the first of twenty-eight Cyclones - ordered in 2004 from Sikorsky at a cost of \$1.8 billion – will be delayed until at least 2010. A team of pilots, mechanics and technicians assembled to do trials on the first new helicopter has also been put on hold because of the delay.

Sikorsky's website still says the first Cyclone is due for delivery in November but there have been no specific denials of this story from them.

The Sea Kings were going to be replaced more than a decade ago by EH101 [Merlin] heli-



copters under a contract set up by an earlier government but that deal was overturned by a new government in 1993 that found itself unable to reinstate the EH101 when they rethought the requirement. A new contract for the Sikorsky S-92 variant was not signed until 2004.

CHINA

The Maritime Safety Administration (MSA) of China has signed a contract for the supply of two AW109E Power light twin turbine engine helicopters, with an option for an additional two to be exercised next year. The MSA is responsible for monitoring all inland and coastal waters and these two helicopters will be dedicated to controlling and fighting water pollution. The AW109 Power helicopter was selected following the evaluation of the responses to an international tender issued by the Ministry of Telecommunications of China, to whom the MSA belongs. The AW109 Power was chosen for its class leading operational capabilities and performance in the maritime role. The AW109 Power will be used by the MSA for pollution control and they will operate aboard the MSA's new large vessels operating in the Guangdong province, Southern China. The MSA's activities are planned to be further expanded to cover all regions in the next few years. With the completion of additional vessels already ordered by the MSA, the number of helicopters needed by the MSA is expected to grow significantly, further strengthening the success of AgustaWestland in China.

JAPAN

Field Aviation of Toronto has been awarded a contract to convert two additional Bombardier de Havilland DASH 8-300 turboprop aircraft as Maritime Patrol (MPA)/Search and Rescue (SAR) platforms for the Japan Coast Guard. This follows an initial contract for three Japanese DASH 8-300 MPAs signed in January of 2007 and currently under completion.



Sojitz Corporation of Japan is the prime contractor to the Japan Coast Guard for this project. The two Q300 aircraft will be acquired from Bombardier Aerospace, including Field Aviation's modifications. The aircraft will be modified by Field Aviation at its Toronto modification centre and will feature a mission interior, observation windows and an air-drop capability through the in-flight-operable rear cargo door.

Surveillance sensors employing the latest technology will be installed, including a 360° surface search radar, a stabilised FLIR electro-optical multi-spectral imaging payload, as well as a new suite of modern mission navigation communications systems. The aircraft modifications, valued at \$13M, will commence in January, 2009, and both aircraft will be delivered by November, 2009.

The Dash 8 was first modified for the Maritime Patrol role by Field in 1995, when three aircraft were delivered to Surveillance Australia which provides airborne surveillance of the Australian Exclusive Economic Zone (EEZ), under the country's *COASTWATCH* program. Two additional Dash 8 MPAs were delivered to Australia in 2000, and Field is currently modifying additional aircraft that have seen the Surveillance Australia fleet grow to 10 Dash 8s by the end of 2007.

Other customers for Field's Dash 8 MPA/ SAR Aircraft modifications include US Customs and Border Protection, where the first of a fleet of Series 200 MPAs entered service in 2005, as well as the Swedish Coast Guard and the Iceland Coast Guard. [Field]



PRAGUE 25-27 APRIL 2008 >>> THE AVIATION EXHIBITION IN THE HEART OF EUROPE



MEDITTERANEAN

A Libyan delegation has been meeting senior Armed Forces of Malta officers for talks on SAR co-operation between the two countries. The aim of these talks is to bring about an agreement in a number of operational and training fields. Much headway has been made over the last eleven months.

The eight-man Libyan delegation is headed by Mohammed Ahmed Rashid, General Manager of Tripoli Port and includes officials from the Libyan maritime authorities and the Libyan coast guard.

Brigadier Carmel Vassallo, AFM commander in welcoming the Libyan delegation augured that Libya would take up an offer to train its personnel in Malta on various aspects of SAR mission-planning and co-ordination. [Times]

NIGERIA

The search and rescue operations of the Nigeria Maritime Administration and Safety Agency, NIMASA, are to get a boost with the purchase of AW139 helicopter due for delivery in March.

The helicopter will be manned by Naval pilots in the Agency's Maritime Guard Command unit. It is also equipped with emergency medical evacuation stretchers and oxygen bottles.

UNITED KINGDOM

MILITARY SAR FORCE: QinetiQ, in a partnership with the Ministry of Defence's Joint Test and Evaluation Group (known as ATEC – Aircraft Test & Evaluation Centre), has completed a 12-month, £5.25M Carson blades project to increase the capability of the Royal Navy Sea King HC Mk 4 helicopter. The work, carried out for the Sea King Integrated Project Team (SK IPT) in support of an Urgent Operational Requirement (UOR), now enables the Sea King HC Mk 4 to be deployed in support of Operation HERIC in Afghanistan – providing much needed capability.

The main rotor blades on the aircraft have been replaced by modified Carson composite blades (produced by Carson Helicopter inc) and the tail rotor was replaced by an AgustaWestland 5-bladed tail rotor system. A rigorous and intensive series of performance evaluation and flight testing was then conducted by ATEC using a QinetiQ-owned Sea King test aircraft. These confirmed initial predictions that the new system generates up to 2,000lb increase in maximum hover mass at high altitude plus enable a significant increase in the maximum forward speed.

Carson blades first came to the MOD's attention six years ago during a Sea King maintenance symposium



and the SK IPT was keen to investigate the technology further, but funding and other operational commitments did not immediately allow the idea to be developed. Some time later however, the MOD had to look at extending the life and capability of its current medium lift Sea King and Puma helicopters. Funding was made available to investigate Carson's claims of increased performance and QinetiQ was tasked with conducting a feasibility study. The results confirmed that Carson blades were indeed a cost effective upgrade that delivered real performance improvements, so the MOD moved to bring them into service quickly for use in operational theatres.

The project was formally declared as an UOR in December 2006 and QinetiQ selected to act as the prime contractor responsible for integrating both modifications. QinetiQ used their trials Sea King XZ575 and deployed it Colorado in the USA for an exhaustive flight test programme that maximised the 'hot and high' conditions at the trials site.

FUTURE SAR: Privacy issues have led to one of the contenders for Future SAR in the UK dropping plans for using UAV's for coastal patrol.

VT Group, Lockheed Martin and British International had included the use of unspecified unmanned aircraft in its proposals for the £5bn government contract to provide coastal SAR operation from 2012.

The original plan was seen as a means of reducing flight times by conventional manned craft but the proposal was seen as being too intrusive. The government is expected to reduce the number of potential bidders for Future SAR down to two this coming spring. [Daily Mail]





The UK site of Turbomeca, Turbomeca Limited based in Fareham, Hampshire, has officially changed its name to **Turbomeca UK**. The company is enlarging its accountability, regarding sales, marketing and technical support. It supports 2,000 engines operating in the UK market and has a current employee headcount of 180. The new company is a merger of Microturbo Ltd and Turbomeca Ltd.

There are currently more than 750 Turbomeca engines in service on nearly 600 helicopters in the UK plus 350 RTM 322 engines, co-developed with Rolls-Royce and in use by all of the British Armed Forces.

The UK Ministry of Defence is the largest single customer, with starting systems on Hawk, Jaguar and Eurofighter Typhoon aircraft, the engines for the Stormshadow missile and comanufactures the engines for the Spearfish heavyweight torpedo.

Turbomeca UK provides main engines for Puma, Gazelle, as well and Jetstream aircraft in MoD service and in collaboration with Rolls Royce for the Hawk, Jaguar, Merlin and Apache.

Turbomeca UK provides significant presence both for MRO and new parts manufacturing in the UK market. With the front office organisation newly established and its team of Field Support Representatives, the company is operational throughout the UK and Ireland providing support.

The Fareham site is a 7,000 square metre state-of-the-art facility supporting Arriel and Astazou operators and compliments the worldwide network of TurboSupport Centres providing service to the UK and Irish markets. Across the water Turbomeca can be found at the Heli-Expo in Houston on Booth 1031.

Based close to the action Robinson R44 equipped **FlyingTV** was very busy in the days following last months high profile crash landing by a Boeing 777-236, G-YMMM, on January 17 at 1243 hrs

Working under contract to Independent Television News [ITN] and its customers their operations succeeded in delivering close-up detail of the story from places that can only be reached by helicopter.

The main difficulty was getting access with major restrictions in place following the accident. Within hours Flying TV were able to deliver shots from 2 miles away - but two days later the company was granted exclusive access to a position right above the crash site. This enabled the delivery of "pilot's-eye" view of the final approach to runway 27L and to get forensic close-ups of the aircraft in critical areas such as the engine air intakes.

The company Robinson newscopter G-PIXX was the only helicopter permitted this close to all areas of this incident – this access was partly due to the low noise signature of the R44. *FlyingTV*.



February 2008

Over the past two years **Eurocopter Chile SA** based in Santiago, Chile have introduced a total of nine AS350 Ecureuil helicopters to the Argentinian law enforcement market. Four AS350B3 have gone to the Police of Buenos Aires, two to the Police of Mendoza and a further two to to Gendarmeria Nacional Argentina [including GN-926 c/n 4307]. The ninth airframe was an AS350B2 sold to the Police of Santa Fé. [ECC]

As reported in PAN last month the **US Department of Homeland Security** (DHS) has continued to expand its plan to extend the taking of fingerprints from international visitors arriving in the USA. The latest locations affected include Boston Logan International Airport and Hartsfield-Jackson Atlanta International Airport. On an average day at Logan, almost 2,000 international visitors complete US-VISIT biometric procedures. Visitors from the United Kingdom, Ireland, Germany and France comprise the largest numbers of international visitors arriving at Logan. Atlanta Airport began 10-fingerprint collection on January 6, 2008.

Seven other ports of entry will soon begin collecting additional fingerprints. The next ports scheduled are: Chicago O'Hare International Airport; San Francisco International Airport; George Bush Houston Intercontinental Airport; Miami International Airport; Detroit Metropolitan Wayne County Airport; Orlando International Airport; and New York's John F. Kennedy International Airport.

This suggests that visitors to the forthcoming Heli-Expo at Houston may well be affected. The remaining air, sea and land ports will transition to collecting 10 fingerprints by the end of 2008.



Goodrich Corporation has acquired Skyline Industries, Inc., a leading manufacturer of lightweight crashworthy military helicopter seats and helicopter floor armour. Terms of the acquisition were not disclosed.

Skyline employs around 40 people at its Fort Worth, Texas facility. Major customers include the US Department of Defense, Eurocopter, Bell Helicopter and Boeing. The company began operations in 1960, and in 2007 generated approximately \$7M in revenue. <u>http://www.goodrich.com</u>.

The Texas Department of Public Safety (TDPS) has announced that their latest order of five Eurocopter AS350B2 AStars will feature **Chelton Flight Systems**' Synthetic Vision EFIS. Each aircraft will be outfitted with a Primary Flight Display (PFD), a Multi-Function Display (MFD), an Air Data and Attitude Reference Heading System (ADAHRS), and Global Positioning System (GPS). Additionally, the system will include WSI weather integration, Helicopter Terrain Awareness and Warning System (HTAWS) traffic integration, and will run on Chelton's newest software package, 6.0B. With the fleet to be used throughout the state of Texas for a wide range of missions, system reliability, flexibility, and performance were keys to the decision to /].



Cessna Aircraft delivered 1,274 aircraft in 2007 - including first deliveries of four models: the newly acquired (from Columbia Aircraft) Cessna 350 and 400 single-engine pistons, the all-new Citation Mustang entry level jet and the upgraded Citation Encore+ business jet. During the year, Cessna delivered 387 business jets, 80 turboprops and 807 piston aircraft. In 2006, the company recorded deliveries of 307 business jets, 67 turboprops and 865 piston aircraft.

Cessna plans to deliver 470 business jets in 2008.

ITALIAN SCENE

Words by Dino Marcellino Images by OMA Sud From Italy PAN's local correspondent re-

ports on the first flight of a new light aircraft. The birth of a new project always offers the taste of adventure, the first flight of an aircraft an emotional fulfilment of hard work and intense engagement.

OMA SUD, a Firm founded on 1988 to produce aeronautic airframes, has designed and developed an innovative general aviation plane, Skycar, which flew for the first time in late December 2007 in the hands of an experienced test-pilot, Commander Mau-



rizio Cheli (a Eurofighter test pilot and ex NASA astronaut).

The Skycar is a multi-purpose twin offering Lycoming IO-360 C1E6 piston engines laid out in a pusher configuration. Its twin tail boom design offers a large cabin volume for both for passengers and baggage. The cabin can accommodate five people, including the single pilot and equipped with a state-of-the-art glass cockpit it is to be certified to operate IFR. The aircraft can be configured not only for passengers but also for **medical evacuation**, light cargo, and survey. The original concept envisaged operations in the air ambulance, surveillance, police, pollution detection and control roles. Two side cabin doors are supplemented by a third door in the rear between the two tail booms allowing easy access also to freight or a stretcher. The landing gear is retractable.

	Specifications:	wing span	12 metre	[39 feet]	
		Length	8.92 metre	[29 feet]	
		Internal volume	6.80 metre	[22 feet]	
		MTOW	1895 Kg	[4,169 lbs]	
		Max payload	500 Kg	[1,100 lbs]	
	Performances:	cruising speed	348 Km/h	[188 knots]	
		Max approved altitude	5500 m	[17,800 feet]	
		Rate of climb	8.9 m/s	[1,750 ft min]	
		Stall speed	113 Km/h	[60 kts]	
	Cruising range from 5 hr (1700 Kms) to 7.5 hr (2550 Km				

OMA Sud has established headquarters and main facility at Capua, and two more plants in Caivano and Trentola Ducenta, all them in Campania Region in southern Italy.

First 45 minute flight took place at Oreste Salomone Airport in Capua. The aircraft reached an altitude of 1,077 metres [3,500 feet], performing a range of manoevres before touching down at 70 knots in 150 metres [490 feet].





February 2008

The UK Ministry of Defence is purchasing four Hawker Beechcraft King Air 350 surveillance aircraft under an urgent operational requirement deal expected to support operations in Afghanistan. The delivery schedule is likely to be from summer this year.

The MoD is tight lipped on the acquisition but it is believed that the operator is likely to be the Army Air Corps. Mission equipment could include a ground-surveillance radar and electro-optical/infrared sensors, similar to 350ERs recently sold for use by the Iraqi air force. [Flight]

Ed: Although this is a military project it may well carry a message with a significant bearing on police surveillance in the UK. The previous contract of this nature went to Britten-Norman – the Defender being a type with something of a history in UK police and army surveillance - and undoubtedly that company bid for the contract. .Here we have the MoD moving to the low-wing King Air and we have al-



ready heard of Cheshire Police moving from the high-wing BN-2 to a helicopter. It seems unlikely that there will be any further surveillance sales of the BN-2 aircraft.

INDUSTRY AT THE HAI HELI-EXPO

Two workshops related to heliport design are planned to be held at HELI-EXPO 2008. These will focus on the design of Private Use (PPR) and Hospital Heliports in the USA and General Aviation Heliports designed to meet the requirements of ICAO Annex 14 Volume II – Heliport Design.

The first workshop will include an overview of 14 CFR part 157, Notice of Construction, Alteration, Activation, and Deactivation of Airports, including FAA Form 7480-1, outlining notice requirements to establish a heliport. This workshop will be presented by E.C. Hunnicutt of the FAA Airports Division. Dr. John Leverton, HAI Heliport Design Focal Point will provide a review of the design requirements embodied in the 2004 FAA Heliport Design Advisory Circular (A/C) 150/5390-2B. The workshop will be held on Sunday, February 24, 2008. It is scheduled to begin at 9:30 a.m. and adjourn at 12:30 p.m.

The second workshop will consist of a comparison of the ICAO Annex 14 Volume II requirements with the US/FAA AC150/5390-2B and outline the initial changes to the annex approved by the ICAO Aerodrome Panel in December 2006 (to be issued in 2008) and the additional changes currently being considered by the ICAO Heliport Design Working Group (HDWG) and the various Sub-groups. The workshop will focus on the ground size and airspace requirements for operations under Visual Flight Rules (VFR). Dr. John Leverton, the IFHA Representative to ICAO AP and HDWG, will present the session that will be held on Sunday, February 24, 2008. The workshop will begin at 1: 30 p.m. and is scheduled to adjourn at 4:30 p.m.

Both workshops will take place at the George R. Brown Convention Center in Houston, Texas. Room locations to be decided.

As was the case last year in Orlando **Goodrich Hoist and Winch** with be hosting their own pre-Heli-Expo event at the Hyatt Regency Houston, 1200 Louisiana Street, Houston. This will draw together Goodrich operators and maintainers of their winches for Technical Briefings, Maintenance Training and an Open Forum for a whole range of topics including product trouble shooting. I was there for last years event and can recommend it for a practical hands-on experience for current and prospective operators of the winch. The company will include a Rescue of the Year Award slot. More details at <u>www.hoistandwinch.com</u>

All the major helicopter manufacturers use the annual Heli-Expo event to provide the media with their latest take on their own company health in the hope that all the good stuff will make its way into a range of publications worldwide and the bad stuff gets overlooked. It does not always work out for the presenters, as the development of new projects extends over many years rather than a few months there is often little to shout about from year to year. This is brought into glaring prominence when old helicopters are presented as new and 'exciting' new projects are hailed as the greatest advance in one year only to be unceremoniously dropped in favour of the next greatest advance the next year.

Very occasionally in the past these orchestrated events have been not to be missed bun fights between manufacturer and press – which means you need to get to them all to see the unpredictable take place in front of you. Very difficult to do when each manufacturer wants to put their case forward in the first few hours of day one!

Technology helps and a certain manufacturer went to the trouble of recording and broadcasting one years event in audio, edited video and the 'Full Monty' for broadcast on its web site. They were in the right on that occasion but it is tempting to wonder whether it was really worth all that trouble for what was only really a one off press knocking side show.

In 2007 **Robinson Helicopter** Company manufactured 823 new helicopters, the most civil helicopters ever produced in a single year by one company. The industry record was 806 previously set by Robinson in 2005.

Robinson also broke the record for production of a single helicopter model in one year, producing 664 R44s. The prior record, also set by Robinson, was 563 R44s in 2005. While the R44 breaks records, the R22 maintains its market niche finishing the year with 159 helicopters produced.

Robinson expects strong sales to continue in 2008. To meet the growing demand, Robinson is focusing on increasing its production rate, which already averages 18 new aircraft per week. <u>www.robinsonheli.com</u>.



Eurocopter, the world's largest maker of civil helicopters, reaped record revenues and orders in 2007, providing another sign of rampant global aerospace demand which analysts say may have peaked in 2007.

Revenue at the helicopter unit of European aerospace group EADS rose around 10 % to 4.17 billion euros (\$6.01 billion) in

2007, the centenary year of helicopter flight, up from 3.8 billion in 2006. The company delivered 488 helicopters.

Chief Executive Lutz Bertling unveiled Eurocopter's highest ever number of new orders for military and civil helicopters, reaching a total of 802 in 2007 compared with 615 in 2006.

The 2007 orders were worth 6.58 billion euros, lifting the order backlog to 13.5 billion euros, also a record.

Some 51% of the turnover derived from civil and parapublic sales, 49% was related to military products. Overall 68% of the output is said to be exported but with so many new plants being set up across the world to build and manufacture the product it is not clear where this figure is derived.

Orders placed with Eurocopter in 2007 include

- 73 units of EC120 Colibri
- 325 units of the AS350/355 Ecureuil/Fennec/EC130 family
- 134 units of EC135s
- 88 units BK117/EC145 family
- 47 units of the Dauphin/Panther/EC155 family
- 22 units of the Super Puma/CougarEC225/EC725 family
- 95 NH90
- 18 Tiger.



February 2008

Bell Helicopter has announced that many of its older products are now being withdrawn from production now that the newer models are becoming available. The company term is 'optimizing' but a later announcement that the workforce is being trimmed by 5% tends to suggest another term might be more apropriate.

Bell say they are seeing 'tremendous demand' for the 412, 407 and new 429 commercial products, and that they are taking steps to transform the company into a stronger, more streamlined company. Bell is said to be increasing its production capacity while terminating production of its 206B3, 427, 430 and 210 helicopter models. All current customer commitments will be met through 2010.

> The 412 lingers on as the AW139 appears to be taking the cream of the contracts in its class [from all manufacturers], and yet Bell walked away from the new technology it represented after being in

from the start. The removal of the other models is long awaited housekeeping. It is noteworthy that no mention is being made about the 206L4 LongRanger line – perhaps they just cannot let go of the past. The LongRanger was supposed to have been superceded by the broadly similar 407 years ago. As for



the 427, just last year that was still being hailed by Bell as a viable programme and now just 11 months later with sales still under 100 those positive statements have turned to dust. The press hacks who expressed contrary views at Heli-Expo 2007 were being rebuked for their foolish thoughts by Bell salesmen.

The Bell 210, promoted as the 21st Century Huey, gone only three years after its high profile launch to an incredulous audience who could only see a 1960's Vietnam War workhorse. It seems that the sales reflected those initial doubts.

The product line is just not selling in the numbers it ought to be and it seems that many years wandering in a wilderness of its own making has left the Bell product line in a parlous state. The future then rests firmly with an as yet untried 429.

Bell President and CEO Dick Millman has stated that recent analysis of the marketplace has indicated an increased demand for the existing 407 and 412 commercial helicopters as well as the new 429 model. Bell say they are 'fully booked on these models until 2010' but of course the 429 has not even started rolling down the lines yet.

Still, each year Bell can turn to the world of potential customers and point to a creditable number one rating in customer support. OK, so they have lots of spares and can get them to the customers quickly. It just seems that no-one wants the dead weight of new sales of a

new type with no track record to distort that pitch.

This may well be a very negative critique on what was one of the world's major manufacturers but the truth is that unless they get their act together soon the market will dessert them forever in favour of the Europeans.

United Rotorcraft Solutions based in Decatur, northern Texas will be promoting their specialist completions capability on Booth 1337.



Spectrolab consistently promotes the complete product offering of high-intensity searchlight systems. Searchlight products such as: Nightsun® XP; SX-16 Nightsun® (White Light) and SX-16 Nightsun® IFCO (In-Flight Infrared ChangeOver); SX-5 Starburst; SX-16 P (Fixed-Wing Aircraft Searchlight); and the CHIS (Commercial High Intensity Searchlight).

Spectrolab strives to develop new products that compliment the traditional product line, while enhancing end-user functionality and system performance. The Nightsun® XP Searchlight is a modified version of its predecessor with redesigned components and software package that offers direct linking capabilities to most thermal imaging systems. They recently developed and sold the same digital platform with an In-Flight Infrared ChangeOver filter included, the Nightsun® XP IFCO Searchlight.

Another new addition is the recently developed SpectroLink Integration System. Spectro-Link is a valuable addition that provides linking capabilities to imaging systems for all SX-16 and SX-5 Searchlight Systems.

For HAI Heli-Expo 2008, a new booth will feature a display of the Nightsun® XP and SX-16 Nightsun®, both will be White Light versions. As visual aids for the Customers, they will display the SpectroLink Integration Box and Hand Controllers. Product specification sheets are available on our website and during the show in our booth.

At the show you can speak with Mr. Ed Ringo, Busine ss Operations Manager representing Spectrolab, Inc., at Booth: 1813. E-mail: <u>eringo@spectrolab.com</u>

The 'black boxes' do not have the glamour of full airframes but they are at the leading edge of law enforcement technology.

On booth 1313 **Microwave Radio Communications** [MRC], based in North Billerica, Massachusetts are exhibiting a range of communications equipment including their DRS2000-HS Dual Diversity Digital Receiver, an advanced digital central receiver designed specifically for public safety and homeland security applications.

It is generally agreed that analogue downlink systems are not well suited for urban environments due to persistent problems with multi-path interference, fade and signal loss. Notwithstanding the pressures being placed on the industry by governments selling off bandwidth law enforcement agencies have now turned to digital and begun to demand robust, dependable, digital central equipment designed specifically to perform in congested built-up settings. Microwave Radio Communications developed the DRS2000 HS receiver to address



these needs. The DRS2000 HS delivers COFDM demodulation, spatial diversity, advanced decryption and a powerful management interface. COFDM is used to transmit compressed video for high resolution outdoor applications. COFDM's multi-carrier transmission characteristics protect the signal from the effects of multi-path interference; it's coding, interleaving, and guard interval characteristics protect against the multi-path latency delays associated with mobile transmitters.

February 2008

Cal Meeker well known in the USA for his extensive range of bespoke mounts for sensors, searchlights and all the other role equipment items that this industry attracts can be found at Booth 318.

Frasca International, Inc., will be exhibiting a Eurocopter EC135 Level 6 Flight Training Device (FTD) at the Heli-Expo show in their Booth 3749. It will feature Frasca's TruVision Global visual system in a 200 degree display dome. The unit was built for Era Training and will be delivered to their new Training Center in Lake Charles, LA following the show. The Era Training Devices (FTDs), an AS350B2 FTD and the EC135 FTD, classrooms, custom briefing areas and administrative offices.

The EC-135 FTD will be available for test flights and demonstrations in the Frasca booth. Advance reservations for demonstration flights are available by contacting Bob Summers at Frasca International. Email: <u>bsummers@frasca.com</u>

Frasca has built helicopter devices for Bell Helicopter, Bristow Helicopters, SilverState Helicopters, PHI, Air Logistics and numerous other organizations worldwide. Although Frasca manufactures flight training devices for all aircraft types, a growing percentage of their total sales volume is in helicopter devices.



Frasca International, Urbana, Illinois, manufactures flight

training equipment for airlines, flight schools, Universities and military organizations worldwide. Product range includes Flight Training Devices (FTDs), FNPT I, II and IIMCC devices, CPTs, Full Flight Simulators (FFS) and more for all aircraft types, fixed wing and rotary. Frasca has delivered over 2000 simulation devices since their founding in 1958 and celebrate their 50th anniversary in 2008. For more information, visit <u>www.frasca.com</u>.

Dart Helicopter Services will be putting on their usual extensive displays in the hall, Booths 33 & 2263 are the main locations.

As the company increases its world footprint subsidiary Dart Aerospace Ltd., continues to roll out additional EASA approvals with their Bearpaws for AS350/AS355 and EC130 model aircraft being the latest to feature. DARTS Bearpaws have been previously approved by Transport Canada, FAA, Argentina and Austria.

Dart Bearpaws are light weight and are constructed of flexible ultra high molecular weight polymer which resists cracking, chipping and breaking and features an inherent memory so that it returns to its original shape after deflecting under high-point contact loading. The onepiece machined construction ensures a consistent and deliberate load transfer. The Bearpaws will keep the tail rotor up to allow a safer landing and take off in soft terrain such as snow, tundra or sand and come in two sizes 19" for landing in soft or uneven terrain or 13" which is designed for tundra landings.

The Dart Bearpaws offer increased durability over the alternative stainless steel option. Dart also offers equivalent approved Bearpaws for the Robinson R22, R44, Agusta A119, MD369D/E/F/FF/500N/900, Eurocopter SA315B, BO105 and EC135, Bell 206 JetRanger, LongRanger, 205/ 212/214B and 412.



Aeronautical Accessories Inc., a subsidiary of Edwards & Associates Inc., has a new 2008 catalogue out in time for the Heli-Expo. This new reference work has been sent to helicopter owners and operators worldwide but there are expected to be more than enough available for picking up in Houston.

Customers will see several new products, everything from new side facing seats for the Bell 412 to reduced weight high skid tubes for the Bell 206 LongRanger. The overall length of the skid tube is reduced by about twenty-six inches and the total weight of the skid gear is reduced by 18 pounds. These are aluminum alloy tubes designed to disperse the weight of the helicopter while at rest and come complete with one-piece forged saddles, ground handling lugs, tow ring and skid shoes.

This year's cover features a photograph of four Miami Dade rescue air helicopters in formation. Edwards & Associates, Inc. outfitted the rescue helicopters.

For safety, Aeronautical Accessories is developing Pitot Heater Failure Monitors and Standby Attitude Battery Monitors. Both are custom designed units that automatically alert the crew with a visual annunciation on the instrument panel. For the heater failure, it comes on when the current falls below two amps. The Standby Attitude Battery Monitor alert is engaged whenever the standby attitude indicator is operating from the Battery Standby Auxiliary Battery.

The 100 plus page catalog also includes popular accessories like easier to use push out windows, autopilot kit, high visibility crew doors and rappelling fixtures. Some of the new products are currently awaiting FAA certification. To obtain a copy, please call 1-800-251-7094 or send an email to <u>sales@aero-access.com</u>.

Years ago, the Hessen police in Germany with their new EC145s was the first to use the fixed External Abseil Device (EAD01) designed and certified by ecms Aviation Systems. Since then many have followed their lead, ordering the device either through Eurocopter or directly from ecms. Throughout the years the device has proven its outstanding operational value and reliability. Now, ecms has designed Retractable Interface Adapters that turn the fixed arm of the EAD01 into a swivelling device, simply by clicking them between the helicopter and the EAD01 (simply retrofit, no tools required). This greatly improves the operational value of this versatile helicopter especially when used for fast roping operations due to the creation of an approximate one-foot distance between the rope and helicopter skid. It enables crews to perform rappelling missions for SWAT and rescue teams with up to four ropes per helicopter simultaneously or fast roping with skid clearance using two ropes per helicopter simultaneously, as well as Human External Cargo (HEC) operations with the new LifeLine device. Extension can be done during flight and is a one handed operation. Once again the Hessen police are the first to receive the new interface adapters following a vigorous testing with their SWAT-teams in 2007; of course everything is fully EASA certified and FAA approval is underway. Retractable Interface Adapters (RIA) are also available for EC135s and have already been ordered by other units for delivery in 2008. ecms Aviation Systems will be exhibiting at Heli-Expo in Houston next month.





ACCIDENTS & INCIDENTS

8 January 2008 Bell 407 N801DS Air ambulance/Law enforcement. The helicopter suffered an engine malfunction and it forced landed with damage to the airframe on a highway in Deland, Florida. [FAA/Concern]

18 January 2008 Eurocopter AS350 N911EM. Air ambulance of EagleMed, Wichita, Kansas. While enroute to sending facility, engine chip detector warning light illuminated requiring the pilot to land as soon as possible. A night, unaided, off airport landing was conducted. Maintenance crew was dispatched and aircraft was recovered by ground transport. [Concern]

13 January 2008 Eurocopter EC135P1 N. Air ambulance of HealthNet Aeromedical Services of Charleston, West Virginia operated by Air Methods. A pre-flight inspection of the aircraft revealed a 10" 45 degree angle crack on the trailing edge of one of the main rotor blades. It was difficult to see from the ground, but was clearly visible from the top. The aircraft was taken out of service and the blade replaced. The aircraft is back in service. [Concern]

13 January 2008 Eurocopter EC145 N373TC. Air ambulance of Travis County STAR Flight, Austin, Texas. While landing at rural Travis County location the main rotor blade came in contact with a Juniper tree grounding the aircraft for inspection. Maintenance attended the scene and inspected the aircraft. There was no damage and the aircraft was returned to service.

16 January 2008 Cessna 414G N6640C. Air ambulance of Gallup Med Flight based in Gallup, New Mexico. The flight team with patient and passenger aboard, was en-route to Albuquerque, NM when the aircraft suffered cabin depressurization due to the breakage and partial loss of the front co-pilot windshield. The pilot maintained full control and was able to make emergency landing at base, in Gallup, NM, within 8 minutes. No injuries. [Concern]

21 January 2008 Eurocopter EC135P1 N. Air ambulance of HealthNet Aeromedical Services of Charleston, West Virginia based at Morganstown and operated by Air Methods. A pre-flight inspection of the aircraft revealed a 1" 45 degree crack on the trailing edge of one of the main rotor blades. The aircraft was taken out of service and replaced. [Concern]

DIARY DATES

- 24-26 February 2008 Heli-Expo 2008. Houston, Texas. To be held in the George R Brown Convention Center. <u>www.visithoustontexas.com</u> <u>www.rotor.org</u>
- 2-5 March 2008 ISNR Abu Dhabi, which will be held in the city's International Exhibition Centre.
- ISNR Abu Dhabi will incorporate the former Security and Safety Middle East, Infosecurity and APTS Middle East exhibitions, in response to requests by exhibitors to streamline the region's security events calendar.
- 5-6 March 2008. Avionics Expo 07 ran successfully in March and the 6th edition will take place in the city centre location, PTA Passenger Terminal Amsterdam.
- Avionics 07 saw the development of the Military and COTS/Embedded conference, which attracted many government and military officials and provoked interest in the COTS/Embedded community. The 2008 event will include an UAV element. Civil Conference http://www.avionics-event.com/

Due to the dates of the HAI Heli-Expo this year the next edition is unlikely to be published on its set date of March 1. The edition may be published to the web early if finished in time.

PEOPLE

One of the longest serving air ambulance pilots in the country and the most experienced Captain with County Air Ambulance is set to leave at the end of February.

Tony Stevens (49) from Newport in Shropshire is to take up a senior training post with the helicopter operating company who lease the aircraft to County Air Ambulance [ie Bond Air Services, Ed]

After joining the fledging helicopter service almost at the very start of operations in 1991, Tony has been at the controls ever since, clocking up almost thousands of flying hours to make sure patients are safely airlifted to hospital.

The former North Sea helicopter pilot says he will be sad to be leaving behind friends and colleagues at the RAF Cosford base in Shropshire: "I have had a wonderful time with County, sharing all the emotions of being at the heart of a very important and vital service. I shall miss everyone connected with County, but I feel the time is now right to relinquish the controls and move onto pastures new". [CAA]

Navy News has just carried record of the passing of **Lt Mike Barry**. Although his death from multiple cancers in Toronto was back in July last year his passing is worthy of a mention. Mike was a former pilot with the London Metropolitan Police in the 1980s and flew their Bell 222's and has a small place in history..

Trained in the mid-1960s with the Royal Navy he had served on the Wessex antuisubmarine helicopter. On leaving the service he had worked for Bristow in Aberdeen back in the 70s, as an S61 line pilot and training captain and arrived in London via the initial pilotage contract with Caledonian Helicopters.

His main claim to fame in the law enforcement world is probably that he was the pilot of the first of their 222 fleet, G-META, when it lost both of its engines over London in 1987.

On May 6, 1987 Bell 222A G-META took off on a patrol over London from the Lippitts Hill helipad with five aboard flown by Captain Michael Barry then aged 42 and with over 11,300 hrs, over 600 of which were on the Bell 222.

During the flight north of the Greenwich Royal Naval College the pilot noticed an instrument indication that the No.1engine power turbine speed had fallen to 40%, recovered to 100% and then fell again to zero. All other instrument indications were normal. Such a display on the instruments was rare, but most fluctuations were a result of instrument failure rather than a fault with the equipment it was monitoring. Nonetheless, with the flight approaching the end of its intended 75 minute length, the pilot heeded the warning and elected to return to Lippitts Hill, some 4 - 5 minutes flight time away.

Two minutes into the return flight an increase in background noise on the intercom system was evident. The noise was traced to the microphones of the occupants of the rear seats, the two passengers and the rear observer, and was evidently an ominous background rumbling coming from the area of the engines above their heads. By the time the Bell and its



five occupants were about ½ mile south of the base, over Chingford, the noise was very evident even without the enhancement of the microphones.

At a speed of 40 knots [50mph] and with the radio altimeter indicating a height of 50 feet, they were crossing the Lippitts Hill perimeter boundary fence as an explosion ripped apart the No.1 LTS101 engine. The resultant debris peppered the surroundings, causing severe damage to the No.2 engine and sections of the airframe. Engine debris was found in the

February 2008

police horse paddock immediately to the south of the landing area. To the strident sounds of the low rotor speed warning the helicopter thumped down on the grassed area between the paddock fence and the landing pad and rolled forward to a halt. Exactly on the "H" of the pad.

The crew and passengers, all uninjured in spite of the hard landing, evacuated from the left side of the Bell as Captain Barry remained behind to shut down the systems and successfully deal with a small fire that had broken out in the devastated engine bay after the landing.

The rest as they say is history. Stuck uninsured the aircraft was replaced by a 'temporary' AS355F1 and when the time came to change the 222's the 355 had already proved itself to be a cheap and capable tool for the job. The new fleet was the AS355N.

Beyond that, following this and many similar incidents [not all with the ill-starred LTS-101!] future certification requirements saw to it that one exploding engine should no longer take out its partner ... JAR was born.



Right: One relic of the accident was this tail boom of G-META. It was replaced in the rebuild and is now in a local museum.

