

Police Aviation News

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Air Ambulance & Australia Special

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AMTC

Air Medical

Transport

Conference

San Jose, CA

Extra feature- Report from Australia pages 14-16

AIR MEDICAL TRANSPORT CONFERENCE

Air Medical Transport Conference [AMTC], San Jose, California October 26-28 2009

FROM THE EDITOR

A few years ago the editor was involved with a publisher deeply into the air medical industry and the marrying of PAN ideals with that publisher led to the publication of a short lived hard copy publication [JAES] and the increased widening of PAN interests to encompass other sectors of the airborne emergency services market. The Air Medical Transport Conference [AMTC] was known about, but attended by others in the partnership, it never entered into first hand knowledge until last month.

So, how does it compare with other ostensible 'aviation' trade shows?

AMTC could be compared to the HAI Heli-Expo but the only direct link is that it is a multi-venue annual show that travels the US. AMTC is intensely niche air ambulance and far smaller than the general helicopter industry show. Its nearest contemporary is the *Air Med Conference* last held in *Prague* during 2008 and next due to appear in Brighton, United Kingdom, but that is truly international where AMTC is very much a US item.

Unlike the majority of trade shows I report on AMTC is not really about aircraft, it is more about the crews. A major conference programme is in place and that denudes the exhibition hall of people for most of the day. When the delegates do appear it is to congregate away from the exhibits and partake in consuming industry sponsored food.

The aircraft are there but they tend to provide a mere backdrop to other activities including a fairly intensive air of competition among the medical crews. An arena at one end of the hall includes a raised competition area and is overlooked by stepped up seating from where an audience views, applauds and congratulates a succession of competitive 'gladiators' competing to diagnose and treat a range of severely dismembered lumps of plastic and foam. It seemed that sellers of these gruesome replica body parts are as important as the aircraft manufacturers in the exhibition hall. Air Med typically undertakes similar exercises.

One source suggested that where most aircraft exhibitions are designed to entice those with some knowledge of the product – the operators and users of helicopters - to purchase airframes and equipment, AMTC does not. The contrast is because it seems that the typical buyer of helicopters in the US air ambulance sphere is more likely to be a wholly independent hospital or surgery head devoid of specific aerospace technical knowledge. That apparently suggests some might be choosing a helicopter by the colour of the upholstery, but it is more a case of specifying the size of the budget. No doubt it is a limited perception but the fact that it even surfaced may be significant. Large numbers of US air ambulances are leased from specialist operators including Air Methods, Air Evac, Era, Omniflight and others, it is often they who call the shots on specific aircraft selection and equipment layout to a fleet standard. For them such as AMTC may not have a strong draw, they can undertake selection and purchase in their boardrooms. So perhaps AMTC is simply industry supporting the aeromedical forum and uses the opportunity to showcase airframes and release pertinent press releases.



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Until recently a UK charity usually employed health and fund-raising professionals to raise the money to lease an airframe and provide for its equipment and crew and then left the choice of airframe and most of the equipment fit to the lease provider which in turn used its aeronautical experience to chose the fleet standard of the equipment fit. Recently there have been changes whereby the UK charity now seeks ownership and that changes the exact manner whereby the aircraft is chosen, operated and role equipped.

Bryn Elliott

DART Aerospace has received FAA approval of the DART Comfort Seat for the Bell 205/212/214 series aircraft. Transport Canada and EASA approvals have been previously received.

Vertical reference operations present enough challenges to pilots without the added distraction of a seat whose side bolster lumbar support impedes the operator's movements. The Comfort Seat eliminates the lumbar support and increases the comfort of the seat. The kit consists of a durable aerospace grade thermoformed alloy seat bucket and covered seat cushions. The installation requires no permanent modification to the seat and uses the existing seat (Bell p/n 205-070-798-011/-101 or equivalent). The seat is compatible with OEM seat & restraint systems.



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AgustaWestland announced that Life Star of Kansas signed for an AW119Ke helicopter during a ceremony at the AMTC. The helicopter will be used for medical transport and will be delivered to the customer in December of this year.

Speaking at the ceremony, Lou Bartolotta, Executive Vice President Sales for North & South America said, "For over 20 years, Life Star has served the State of Kansas with an outstanding commitment to safe, state of the art air transport. We are pleased to have been selected by Life Star to provide an AW119Ke as the newest addition to their fleet."

Life Star Executive Director Greg Hildenbrand said, "We selected the AW119Ke because it is the best value, best performance helicopter for our mission. The cornerstone of Life Star's mission is to provide the highest quality care in a safe manner. This aircraft allows for full-body, patient access and will be equipped with the latest safety technology, including night vision goggles, terrain and nearby aircraft warning systems, satellite tracking, weather and advanced communications. With this new platform, we will continue to fulfill our mission with expanded capability and improved performance."

The AW119Ke will be based at Freeman Field in Junction City, Kansas. Life Star is a not-for-profit corporation in business since 1988 with bases in Lawrence and Osage City, in addition to its headquarters at Forbes Field in Topeka. It operates under its own Part 135 operating certificate and has been accredited by the Commission on Accreditation of Medical Transport Systems (CAMTS) since 1996.

Approximately 190 AW119Kes have been ordered by over 90 customers in almost 30 countries worldwide so far to perform a number of roles also including EMS, offshore transport, law enforcement, VIP/corporate transport, firefighting and utility.

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An Agusta A109C operator, North Memorial Air Care, has reached and surpassed a historic milestone when their A109C model helicopter achieved 10,000 flight hours. North Memorial is the first operator in the world to achieve 10,000 flight hours with an A109C helicopter. On the first day of the AMTC the milestone was marked by AgustaWestland North America's Lou Bartolotta, Executive Vice-President Sales for North & South America. Formed in 1985, North Memorial purchased the A109C model in 1991. Since that time they have flown over 5,000 patients in Minnesota and western Wisconsin. North Memorial's Air Care unit is on call 24 hours a day, seven days a week and operates from five bases.

On the AgustaWestland booth the company was showing a sleek modern red and white Careflight A119 N205CF alongside an odd orange motorcycle, the latter seemingly out of place was a custom-built motorcycle created by Orange County Choppers and inspired by the Canadian EMS operator Ornge who have a number of AW139 helicopters on order.

Based in Newburgh, New York, Orange County Choppers is one of the world's premier builders of custom choppers. Earlier this year, Orange County Choppers partnered with Ornge to create the custom-chopper with the goal of raising awareness to Ornge's story and mission. With support from AgustaWestland, the project in-



cluded a site visits to the Ornge headquarters in Toronto and to the helicopter production line in Philadelphia, both inspiring the resultant custom bike.

The story of Ornge and the making of the custom chopper form the basis of an episode of American Choppers to first air on November 12.

Last year Ornge signed for twelve AW139 helicopters. The first is scheduled for delivery in early 2010 and will feature a full aeromedical interior along with a de-icing system for operations in adverse weather.

As reported in the November edition of Police Aviation News, Aerolite has received an order for ten medical interiors for the AgustaWestland AW139 helicopters from Ornge.

The new helicopters are to receive a dedicated medical interior, single and dual patient capabilities, and medical system and equipment integrations. Ornge will closely work with Aerolite on all aspects such as clinical functionality, ergonomics and safety of the transport medicine cabin solution. These new helicopters will enable Ornge to provide transport medicine services to the patients of Ontario in a greater variety of conditions.



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Era Helicopters LLC has signed a Support by the Hour Contract with Turbomeca USA (Safran group) Covering 43 Arriel 1D1 Engines.

The Arriel 1D1 engines equip Era Helicopters' AS350 helicopters. This new contract follows the Turbomeca SBH® contract signed last year for Makila 2A engines, powering Era Helicopters' fleet of Eurocopter EC 225 helicopters.

Era's contract is based on a modular maintenance concept which covers unscheduled removals and overhauls. The engines are performing offshore missions in the Gulf of Mexico as well as flight seeing tours in Alaska. They are expected to fly over a combined 20,500 hours.

Operating over 170 helicopters globally, Era Helicopters LLC based in Lake Charles, LA, remains at the forefront of the oil and gas support industry with its technologically advanced helicopter fleet. Era and its subsidiaries provide personnel transport services to the shallow and deepwater oil and gas fields in the Gulf of Mexico and Alaska, air medical transport services within the U.S., leasing services to third parties worldwide and a variety of aviation-related services at its FBO in Anchorage, Alaska. Era is committed to service and safety excellence in every aspect of its operations.

Air Evac EMS, Inc., which operates Air Evac Lifeteam and Texas LifeStar, selected Becker Avionics' 160mm BXP6403 Mode S Transponder (Class I) for installation in EMS aircraft.

The BXP6403 helps Air Evac to meet the future requirements of transponder technology by enhancing safety and situational awareness through the use of traffic information. The BXP6403 is a compact and lightweight single block Mode-S transponder. It is compatible with existing Mode A/C systems and provides the addition of data-link technology. The data-link provides flight critical information such as traffic which increases situational awareness while reducing the need for additional traffic detection equipment. Furthermore, the BXP6403 reports additional aircraft specific details to ATC providing a clearer picture of the flight environment.

Air Evac selected the BXP6403 as a straightforward retrofit solution for the Bendix-King KT76A transponders currently installed in their aircraft. As a true drop-in replacement the BXP6403 saves time and money for Air Evac by enabling them to switch to Mode S transponder technology.

The BXP6403 Mode S Transponder is equipped with extended squitter and SI code function and it provides an interface to the central aircraft data system. It allows ELS, supports EHS, as well as ADS-B via extended squitter. The BXP6403-1-(01) is intended to serve IFR/Class 1 aircraft. It is certified according to TSO C112 and ETSO-2C112b and is suited for VFR and IFR operations up to 50,000 feet.

The Mode S ICAO address and additional fixed data are stored in a separate address module, AM6400-1-(01), which is plugged in to the transponder and remains in the aircraft when the transponder is exchanged.

One of the few non-US announcements also came from Becker who highlighted that the German air ambulance operator ADAC Luftfahrt Technik had recently upgraded the existing Becker Avionics DVCS 5100 Digital Audio and Intercom System installed on two ADAC EC145 HEMS helicopters to the new state-of-the-art DVCS 6100.

The replacement was easy because the new DVCS 6100 is designed as a 'drop-in' replacement for the DVCS 5100 series. With this upgrade, only the existing Audio Control Units (ACU) and the Remote Control Unit (REU) are replaced.

The DVCS 6100 has been designed for both rotary and fixed-wing applications, and offers up to 8 communication transmit (TX) and up to 8 receiver (RX) channels, an integrated warning tone generator for up to 8 different signals, an amplifier for 2 cockpit speakers, as well as interfaces for 2 Cockpit Voice Recorders (CVR) and a Public Address Amplifier (PA).

Up to 6 Audio Control Units can be operated together with one remote module. Any unit can be

configured with dedicated software to give full adjustments across different on-board systems. The system meets the highest standards for night operation under NVG and military conditions. The ACU 6100 is available with NVIS green (MIL-STD Green B) and white Backlight, and it offers emergency and slaved mode operation as well.

Air Methods Corporation, the world's largest air medical transportation provider, has taken delivery of nine new Eurocopter helicopters in 2009, maintaining its fleet upgrade despite a challenging economy.

The deliveries included seven AS350B3s, one EC130, and one EC 135 in 2009. The helicopters join Air Methods' sizable fleet of more than 330 helicopters providing emergency medical services throughout the United States.

Air Methods operates a variety of Eurocopter products, including EC130s, EC135s, EC145s, AS350s, AS365s, BK117s and BO105s.



Air Methods displayed a 2006 Eurocopter EC145 N145SU c/n 9102 featuring a Meeker step carrying an SX-5 searchlight. It has been operated in the USA since 2007 and currently flies for Stanford.

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Metro Aviation has been awarded a completion contract to finish two air medically configured helicopters for HealthNet Aeromedical Services based in Charleston, West Virginia. HealthNet, a long time air medical provider, will receive the new EC135 and EC145 as additions to their current operating fleet.

The HealthNet aircraft will receive the comprehensive air medical interior, avionics, and exterior finishing at the Metro main facility located in Shreveport, Louisiana. The company will complete the aircraft in a SPIFR configuration with night vision capable cockpits complete with the latest generation avionics and safety equipment that exceed all the recent NTSB recommendations for air medical helicopters. Both aircraft will also receive the Metro designed and STC'd air conditioning system prior to delivery early next year.

Metro Aviation teamed up with CAE to announce that Metro has selected CAE Flightscape to provide the analytical solution component for its newly established Flight and Operational Quality Assurance (FOQA) programme.

Metro Aviation recently added to its current operational fleet of 70 EMS aircraft, two EC145 helicopters for Cleveland Metro Life Flight, equipped with the CFDVR system from Eurocopter that will be a data source for FOQA analysis.

Flightscape will be used to analyse flight data and voice information to identify unsafe trends, to develop corrective safety actions and to monitor the effectiveness of safety actions. Of par-

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ticular interest is the ability to overlay actual flight data from multiple flights against an established baseline flight path.



Metro Aviation is among the first in the air medical industry to implement flight data analysis as a proactive safety management system.

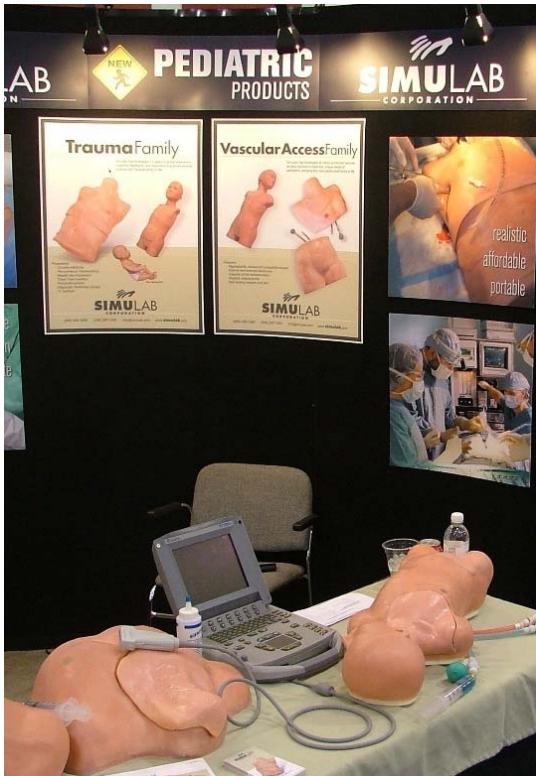
Metro currently operates two EC145s for Cleveland Metro Life Flight with the third expected to enter service last month after evaluation by Metro Aviation and Eurocopter of the addition of Wide Area Augmentation System (WAAS) capability for the EC145. A fourth aircraft is expected to enter operation in March 2010.

Metro Aviation, Inc., based in Shreveport, Louisiana, United States is a worldwide provider of completion services for all missions and types of helicopters and specialises in the EC135 and EC145 with several Supplemental Type Certificates (STC) developed by the company for these and other aircraft. Metro is an FAA approved repair station, approved Eurocopter Service Center and FAR Part 135 air medical operations provider at several locations across the United States.

Air Ambulance Worldwide (www.airambulanceworldwide.com) a provider of emergency ambulance services has achieved the prestigious European Aero-Medical Institute (EURAMI) accreditation. EURAMI is recognized as the top accreditation body in the United States and Europe for air medical evacuation providers.

The EURAMI Accreditation represents excellent service for patients utilising air medical trans-

portation. This includes a high level of safety and quality in terms of capabilities, medical management and qualifications, aircraft configuration and equipment, operational issues, communications, management policies and quality management. With this accreditation, Air Ambulance Worldwide joins an elite group of organisations recognised by EURAMI. EURAMI is a non-profit association of air medical professionals and operators from 27 countries in and outside Europe aiming to promote air rescue and to develop and harmonize quality standards and to improve patient care and safety in air medical transports.



Very much a practitioners show with a significant level of exhibitors offering training places and equipment such as intubators and models to practice techniques on in their down time.

Above right: In some instances this same equipment was up on stage as the trained medical air crew competed against each other and the clock to bring the bits of plastic torso to life.



In the wake of the forming story on the proposed Children's Air Ambulance in the United Kingdom [see the November edition of PAN] more than the usual amount of interest was paid to the children's air ambulances currently operating in the US.

Recently the most high profile of these has been Children's Mercy Critical Care Transport 'Just for Kids' based in Kansas City, Missouri, primarily thanks to the recent delivery of a brightly painted EC145 to them. The aircraft graced the hall supported by some of the crew members.

The 'Just for Kids' EC145 N919CM [c/n 9224] serves a 170 mile arc from its rooftop eyrie providing a dedicated service for neonatal and paediatric patients in sections of Missouri and Kansas. The crews are de-



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voted to the child patient ethos and firmly believe that their dedicated skills are needed as additional strata in the air ambulance service.

The EC145 replaced the helicopter Children's Mercy previously used in September this year at a cost of \$12M. The hospital's transport fleet – all dedicated to inter-hospital transport - includes eight road ambulances and a custom-equipped Beechcraft Super King Air 200 fixed wing aircraft for longer transports. The mixed fleet usually operates some 5,000 transports annually.

The rotor wing aircraft is operated by PHi, Inc., an FAA Part 135 certificate holder, and in affiliation with LifeFlight Eagle. The fixed wing Beech aircraft is operated by Stratus Aviation, LLC and ground ambulances are operated in affiliation with MAST (Metropolitan Ambulance Services Trust). Where the proposed UK children's air ambulance project is, like the UK HEMS fleet, charity based the US operation is funded by insurance and operates in close cooperation with three hospitals [recently there were four].

MD Helicopter booth displayed a recently delivered Calstar, California Shock Trauma Air Rescue, MD900 Explorer helicopter N902FN 900-00124 [see right]



A Life Flight Network 2008 Eurocopter EC135T2 N135LF operated by Air Methods.



The build up of flight worthy Bell 429 helicopters continues as the previously flightworthy flight test fleet is brought up to the certified standard and returned to service. Bell was displaying the prototype C-FTNB c/n 57002 in a typical air ambulance fit.

Omniflight were displaying an South West Medevac Eurocopter AS350B3 N530H



Police Aviation News

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PAR

Special Australian Insight

Ryan Baker



Updates
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Law Enforcement

VICTORIA: An update on the new Victoria Police Air Wing fleet. The third Eurocopter AS.365N3 Dauphin helicopter is on a ship and sailing for arrival in Melbourne, Australia, in about four weeks. The AS.365N3 will be given the registration VH-PVD and is the latest hot-and-high performance version of the twin-engine Dauphin series helicopter first used by the Victoria Police Air Wing 30 years ago this year. The new helicopter will step into the primary police role as PVH is put into a backup standby position for police and ambulance work. PVH will go to CHC in Adelaide to be fitted out as an ambulance. PVH currently holds the record for the most hours flown on an N3 series Dauphin helicopter.

The current backup police and ambulance helicopter, an old C1 series Dauphin [right] with the registration VH-PVA, is due to go permanently offline on 30 June, 2010. The Squirrel, VH-PVM, will be sold off next year after being replaced by an Eurocopter EC.135T2i in October this year. The 135 will be operational by next year after modifications to install a FLIR and nitesun. [RB]



Aeromedical

AIR FORCE: Three planes have been marshalled to search for passengers missing after their boat sank in the ocean hundreds of kilometres from the Cocos Islands.

The Government says a Royal Australian Air Force (RAAF) plane has dropped an inflatable life raft to five survivors. At least 20 people remain unaccounted for since the boat went down in the Indian Ocean, 350 nautical miles from the Cocos Islands last night. Seventeen men aged between 20 and 40 were picked up by a natural gas carrier, and two others were collected by a Taiwanese fishing boat. Up to 40 people were on the boat before it sank. Prime Minister Kevin Rudd told ABC Radio's PM program it is an unfolding rescue operation. "The latest advice is that 19 people have been recovered and are on commercial vessels," he said.

"The RAAF has dropped a raft to two persons in the water, and three additional people were seen on timber headed towards the raft."

The Government says it does not know the origins of the boat that sank or its occupants, and it has not ruled out taking the survivors to Christmas Island. The Australian Maritime Safety Authority is coordinating the rescue operation in Australia's vast search and rescue zone. A Royal Flying Doctor Service (RFDS) jet has been sent from Perth and a Customs Dash 8 aircraft has also joined the search. "It's just such a long way away; it's a matter of trying to get aircraft to the region as quickly as possible," said Stephen Langford from the RFDS. He says time is critical. "It's a fairly urgent task because there's still people in the water and the weather is not fantastic," he said.

The Australian Maritime Safety Authority received a distress signal from the stricken boat about 11:15pm. A spokesman for the Home Affairs Minister's office says a small Taiwanese



fishing boat nearby told the Safety Authority that the boat of asylum seekers was taking on water but was not sinking. The Taiwanese fishing trawler was not big enough to take the people on board and it stayed alongside until a Bahamas-flagged merchant ship, the LNG Pioneer, arrived. The ABC understands the merchant ship arrived at the very moment the boat started sinking. The Chief of the Defence Force, Air Chief Marshall Angus Houston, has shed some light on what happened next. "When the first ship got there, this vessel was still intact," he said. "Somehow or other during the process of the interaction between the ship and the trawler and also the stricken vessel, there has been a capsizing and people have ended up in the water." All 40 people on board the sinking boat ended up in the ocean. The Government said there was no moonlight and that made search and rescue very difficult. [RB]

Fire

WEST AUSTRALIA

A two-year-old boy is understood to be trapped underneath a concrete slab at Rottnest Island off the West Australian coast, emergency authorities say. A Fire and Emergency Services Authority (FESA) spokeswoman said the RAC Rescue helicopter had landed at Rottnest to assist in the emergency. She said the Rottnest Island private fire brigade was at the scene. The FESA spokesperson said it understood the boy would be transferred by the rescue helicopter to Sir Charles Gairdner Hospital in Perth late this afternoon. The spokeswoman said details were limited but it seemed a triple zero call was placed this afternoon. "It seems that somehow or other he was trapped under concrete," she said. A St John Ambulance then tasked the rescue helicopter to travel to the island. "It's my understanding they will be bringing the boy back," the FESA spokeswoman said. [RB]