# Police Aviation News

#### EUROPEAN | THE VTOL SHOW AND SAFETY CONFERENCE

OUT

Nov 28-30 2023, Madrid, Spain



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Over four days in November (the 27-30) European Rotors settled in Hall 9, of the IFEMA Convention Centre, Madrid, Spain. This marked the first of a series of ever-changing venues throughout Europe, the first two editions being held in Cologne, Germany. The venue was ideal in that it is about 10 minutes from the Adolfo Suárez Madrid-Barajas Airport (LEMD) and therefore handy for international visitors and exhibitors alike.

Beside the European Helicopter Association EHA and the European Union Aviation Safety Agency (EASA), the Spanish Helicopter Association ATAIRE co-hosted the event with the highly experienced US based Helicopter Association International (HAI) setting up the structure of the event.

The organisers prepared for their biggest show yet, expanding on and learning from the two previous events to make the third edition even better. They were to learn that each new venue has its own foibles and that such migratory efforts bring their own challenges.

European Rotors covers all aspects of the rotorcraft industry, new technologies, innovations, and methodologies; and all mission types, including air ambulance services and search-and-rescue (SAR), police and public safety, aerial work and disaster relief, passenger transport, and advanced air mobility (AAM). The first day focussed on meetings and classes outside the exhibit floor, an EASA VTOL Symposium, the exhibits were open over three days from Tuesday to Thursday

The event benefited greatly from keeping the support of the major market-leading manufacturers Airbus, Bell, Leonardo, Safran. Robinson, Boeing and Pratt & Whitney. This year they also attracted both MD and Enstrom. Although they have each recently been through the trauma of new ownership and remain small in comparison with the aforementioned industry leaders, they no doubt have their own, potentially more limited, aspirations for the future.

#### AIRBUS

Several Airbus Helicopters were at the show, two of which were on the stand area and others spread across the indoor static area. As it turned out being obliged to have an indoor static worked well as the show hours were beset with torrential rain at times.

On the stand were a Police Nacional H135P3 EC-OEN c/n 2233 "Angel 05". The exhibit was completed in executive seating but rumour (you cannot do without a good rumour at these events) suggested that the police decided they did not want to display the full role equipment at the show as it was 'secret.' That is not the first time I have encountered that as an attitude! It always amuses me to hear it when the main audience at the show are the aerospace industry people that have designed the items so carefully hidden from sight! The airframe sported full floatation gear and the AEM sky shout speakers (clearly not something every executive aircraft should have), so the rumour may not have much substance.



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The H135 is the latest delivery to the operator, so it is probable they simply have not yet had an opportunity to fully role equip it – which is a pity only in that it is therefore difficult to contrast it with the rol fit chosen by other nations. *Airbus Helicopters* delivered the first two of 18 H135s to Spain's Guardia Civil and Policia Nacional in October 2022.

The other airframe on the stand area was a fairly standard utility Airbus Helicopters H125 EC-OBG/9373 of Airwork's Helicopters.

Off the main stand a stunning yellow H145 I-DTRE c/n 21161 HEMS machine flown by Bomberos De Asturias operated by Eliance

Another recent delivery was a Guardia Civile H135P3 09\*318 HU26-36A military serial 10302. This was the first helicopter in the new livery for Spain's Guardia Civil (09\*319 is similarly marked) and the fifth of the latest generation H135s that the Air Service (SAER) of the Civil Guard has received, equipped with the new Helionix avionics, of the total of 9 ordered to partially replace its fleet of light helicopters.

The new and elaborate paint scheme that the aircraft carries includes a rendition of the Guardia Civile shield in the tail rotor fairing,

The normal role fit is a Trakka searchlight on the left and a sensor pod on the right but the airframe in the exhibition hall was simply providing a backdrop to a demonstration area.



Completing the quite extensive Airbus line-up there were two EC120 airframes in the hall, the first was a military trainer, 782\*12 and the second SX-HVF in a silver and black finish and operated by Heliswiss. In addition, there was an AS350 CS-HIT of HeliBravo, an Avincis Puma and a Heli-Holland Dauphin in cling wrap demonstrating packaging.

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The Airbus Helicopters media team pulled out all the stops and presented some serious announcements during the show.

First there was the announcement that the Lithuanian State Border Guard Service have contracted to buy three five-bladed H145 multi-mission helicopters to add to their fleet. The three additional H145s bring the total number of Airbus helicopters in service with the Lithuanian government to eleven, further strengthening Airbus Helicopters' position in this mission segment.

In the same region there have been civil sales to Lithuanian operator ASU Baltija of two H125s, the first Airbus helicopters sold to a commercial operator in the country and will also be the first two H125 family helicopters deployed in Lithuania. The H125s replace helicopters manufactured in Russia and will be used for passenger transport and utility missions in Lithuania and other markets abroad.

The Norwegian Air Ambulance has ordered three H135s and two five-bladed H145s that will be used for life-saving missions in Denmark, following a tender the operator recently won in the country. Moreover, the HEMS operator will take delivery of two new H145s in 2024 to expand their fleet in Norway.

Further repeat orders were announced for H135 helicopters for delivery to Austria for air ambulance work there. The customer is ÖAMTC Air Rescue and the contract for two H135s to add to the initial contract for five H135s signed at the end of 2020. The fleet already consists mainly of earlier EC135 models.

ÖAMTC Air Rescue operates 31 H135 helicopters from 17 permanent bases and 4 additional winter bases in Austria. Last year, the operator flew more than 20,000 missions, with an average of 52 missions per day. The operator began providing air rescue services in Austria in 1983 and is celebrating its 40th anniversary this year.



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Airbus Helicopters and ADAC HEMS Academy announced the establishment of the joint venture HMotion, a new simulator training centre for the H135 and H145 family helicopters. HMotion will offer a wide range of cost-effective training courses for helicopter personnel, including mission and critical flight training. Subject to approval by the relevant regulatory authorities, it is expected to be operational in early 2024.

As a first step, HMotion will integrate the full-flight simulators located at the Airbus Helicopters site in Donauwörth and at the ADAC HEMS Academy in Sankt Augustin near Bonn. In a second step, in 2025, all simulator activities will be transferred to a new state-of-the-art training centre in Oberpfaffenhofen, near Munich, which is easily accessible for international customers with Munich International Airport close

#### BELL

The Bell Textron Inc., team were also very forward with their news stories at IFEMA, mainly announcing the delivery of a third Bell 429 to Swiss-based helicopter rescue company, Air Zermatt.

The Bell 429 GlobalRanger HB-XDA c/n 57472 took pride of place on the stand and wears the same colour scheme as its two predecessors. The first, HB-ZSU, took pride of place at the 2013 PAvCon in Austria and yet the company still loved the model enough to buy this third example a decade later.

"Air Zermatt's acquisition of a third Bell 429 not only highlights their devotion to providing life-saving search-and-rescue missions in a particularly demanding environment in the Swiss Alps, but also their trust in Bell in getting them through the missions quickly and safely," said Jacinto Jose Monge, Europe managing director, Bell. "We are thrilled to continue our relationship with Air Zermatt as they expand their capabilities in the region."

With its 75-person medical personnel and flight crew, Air Zermatt provides transport, tourist flights, and rescue operations in the Swiss Alps and surrounding communities. Each year, Air Zermatt carries out around 2,000 rescue missions, the majority of which are with Bell 429.

In addition to the delivery of their Bell 429, Air Zermatt has opted to add their entire Bell 429 fleet under Bell's Customer Advantage Plan (CAP) that protects direct maintenance costs and aircraft value over



time - keeping aircraft in service longer.

Bell also signed purchase agreements for two Bell 407GX is and one Bell 505 aircraft to be sold to JB Investments in Poland, to be used predominantly for private travel. The purchase of the three aircraft was celebrated with a signing ceremony at the Bell booth at European Rotors 2023 in Madrid, Spain.

And the Bell Huey derivatives keep on going. The latest development is of course the Bell Subaru 412EPX originally developed for the Japan military and that means the type is undoubtably expected to remain in production for 25 years and supported for at least the next 50 years.

Renowned for its multi-mission capabilities, since 1981 the Bell 412 has been a preferred choice for customers globally, with over 54% of the fleet dedicated to military and para-public missions. If those production predictions hold true, the four blade twin engine type will have been produced for over 60 years. The original single engine Huey that started this line in 1959 has already served aviation for 63 years.

Pegasus Aero Group, a leading aviation entity, recently conducted a firefighting demonstration flight utilising the Bell 412, emphasizing its high payload capacity and exceptional performance in extreme environments. The helicopter plays a crucial role in safeguarding communities from natural disasters, particularly in southern Europe and the Mediterranean.

The media took part in a Coffee Chat and Snacks with the recently appointed Managing Director of Europe, Jacinto Monge, a Spaniard with Madrid as his birthplace. He is fresh from working in the Far East, previously serving as the Managing Director for Bell, Asia-Pacific, and as the Representative Director for Bell in Japan, where he led Bell's commercial business in China, Japan, Korea, India, South East Asia, and the Pacific, playing an essential role in the significant growth of Bell's business in the region, where the company extended its sales and customer service footprint, adding 326 orders and 281 deliveries during his tenure. Among the contracts agreed during his tenure were the Queensland Police Service purchase agreement for three Bell 429s, and the acquisitions of the Subaru Bell 412 by Tokyo Metropolitan Police and regional Fire Fighting and Disaster Relief departments.

In a wide-ranging discussion, he was making his first European tradeshow appearance since taking up the new post. The main question asked by PAN related to the completion centre requirements in Europe. PAN is aware that some years ago disquiet was expressed by some potential police operators of the Bell 429 that there was an edict that completions should be undertaken at the Bell location in Prague. It seems that requirement has now been withdrawn – although doubt can be expressed about where else the work might be undertaken competently.



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### BOEING

Boeing were present at the show but they did not major on airframes as they are military orientated, so it was pretty much left to their Jeppesen, Foreflight and Spectrolab searchlight divisions to promote the brand. The Nightsun XP IR LED searchlight was on display. This top end model introduced Infrared (IR) LED technology to provide infrared illumination for use with Night Vision Goggles (NVG's). A ring of high-power IR LED's offer wide or narrow focus modes while reducing power consumption by 79% and weight by 20% (compared to our original IFCO filter configuration). Visible white light remains intense with the use of the legacy 1600-Watt Xenon Arc Lamp.

#### BRISTOW

The spirit of Bristow was in the hall thanks mainly to their working partners in the highly successful SAR contracts across Europe. The lead integrator on the Bristow SAR contracts in the UK and Ireland is Nova and they work with others including Smith Myers to provide all that is best In SAR systems for the region.





#### **ENSTROM**

It was good to welcome Enstrom back into exhibiting after the company closed and re-emerged, but the return was somewhat marred by the post event crash of the 280FX Shark on a nearby motorway as they left the IFEMA Conference centre on December 1.

The helicopter crashed on the M40 motorway ring road in Madrid, hitting a car. It had departed from IFE-MA only a minute earlier. The two occupants were injured as was one motorist on the ground. The aircraft, based in France was severely damaged.





#### **LEONARDO**

Two helicopters occupied the Leonardo space, an AW09 [the former Kopter product] and an AW169.

Unii-Fly, currently the only operator serving the offshore wind farms around Britain showed a Leonardo AW169 G-UNIB c/n 69152.

At the show Milestone Aviation Group revealed the signing of lease agreements with UNI-FLY Group for three Leonardo AW169 helicopters.

The deal includes the extension of two AW169 helicopters and the placement of an additional AW169, which is scheduled to be delivered late this year. The new aircraft will operate from UNI-FLY's UK main operating base at Humberside Airport utilising a 2Excel hangar and will support offshore energy missions in the North Sea.

No firm proposals have been put forward for the AW09 to be operated in the emergency services arena



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Mads Nielsen, group CEO, UNI-FLY said the company has placed four AW169 helicopters with Milestone since 2018. "

Off the main stand area was a skid equipped Carabinieri UH-169C CC-20 CSX82139 c/n 72022. The airframe had yet to be delivered into service with the military police operator. It is among the first handful of a total of 22 variants of the AW169 ordered in November 2019 in a general fleet replacement programme that also involves variants of the AW139 and AW119 Koala. The UH-169 was carrying a Trakka sensor and searchlight system.



#### **MD HELICOPTERS**

The return of MD Helicopters to the event under its new management is to be welcomed. The sole airframe on the stand was a 369FF OM-PKV Slovak Training Academy, a small flight school based at Košice International Airport in Slovakia offering civil and military training.

Of the MD900 there was nothing. Thirty years after is first flight the type remains pretty much in limbo, unloved by many but overall, potentially a good airframe simply starved from birth of development. The new management want to divest themselves of it but the lack of ongoing investment in the type means that all the 'issues' it had in service remain to dog it. The issues slowed and then halted production at the plant in Mesa, Arizona, and there does not seem to be an economic way around them.

Nominally 141 airframes were produced, but not all the early serials were manufactured airframes. It is estimated that 111 remain operational worldwide, the manufacturer has three airframes in stock for production and 22 have retired or have been destroyed. Although manufacture of the airframe started in the USA it quickly went to TAI in Turkey and, despite promises from the MD management, never returned to its home country. Those three airframes will be the remaining carcases from the pull-out from Turkey. Building more will therefore entail a major shift in effort.



The technical sticking points of the airframe include the now somewhat ancient Integrated Instrument Display System [IIDS] – effectively the heart of the flight instrumentation. It was there at the beginning, and it remains today. It has not been developed or replaced. Where rival designs have moved on (the EC135 for instance to the Helionix system) IIDS remains to blight future progress. It was always an element of early problems with the MD900 and although it got better it is now so old that most installations are getting increasingly troublesome and expensive to maintain or replace.

The IIDS uses two liquid crystal colour display panels to provide engine and helicopter system information to the pilots, and they are mounted in the centre of the instrument panel. In addition to engine speeds, exhaust gas temperature and engine torques, the system displays cautions and warnings. It has a memory unit which stores fault information that can be downloaded to an external computer. Failure of the IIDS is a no-fly condition.

Over the years MD have sought to replace IIDS but fouled up the development. In the days of Lynne Tilton there was the debacle of the replacement system produced by Universal Avionics. That was dramatically and embarrassingly dropped by Tilton at HAI Heli-Expo 2017 in Dallas, Texas, without prewarning to Universal who were co-located at the show.

There had been a rumour and some of the pre-event media knew that something was afoot, nonetheless it appears that the people most affected – the sales team from the Universal Avionics booth right next door - had not been officially told.

MDHI announced the selection Genesys AeroSystems' new-generation Integrated Display Units (IDUs) as standard aboard its MD 902 Explorer. The Genesys system was to be later in 2017. Although prototypes flew with the system there was not full development. In the spring of 2019 *MD Helicopters were a*nticipating Type Certification for the *Genesys AeroSystems* glass cockpit in the 969 developments of the Explorer by the end of Q4 2019.

That was at the height of delusions in the Tilton MD camp, when they were promising customers the developed MD600 as the MD6XX and the developed MD900, the 969. The former was simply a 600 mockup with a tail rotor, we never did see the 969. Moog took over Genesys Systems in 2020. There are potential replacement systems out there, but a big question mark hangs over whether it will be economic to spend millions on upgrading the younger airframes.



CC\*20 has been equipped with Trakka searchlight and sensor

Also from Italy—and new to the market—is this four seat Konnor Helicopters K2 design. More detail on their website at https:// www.konnerhelicopters.com





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Ollie Dismore, (left in image) late of NPAS and HeliOps was selected as the European Helicopter Association's Safety and Technical Executive in October, a role he takes up this month. He will be working with EHA National Association members, industry, EASA - European Union Aviation Safety Agency and EU Commission in developing effective and proportionate regulation. His first high profile event linked to the new tasking was the show in Madrid. During the five long days he was attending the Rotorcraft Symposium and the show.

He is quoted as saying "Lots of good conversations, across the board, and looking forward to getting to grips with the technical, safety and regulatory challenges facing our industry."



A post event quote from the organisers stated that EUROPEAN ROTORS 2023 closed the doors on a highly successful event, spurred by Industry growth and an exciting new host city.

The four-day show, organised by the European Helicopter Association (EHA) and European Union Aviation Safety Agency (EASA) and produced by Helicopter Association International), saw growth over last year's show in the number of attendees and exhibitors. Attendance at the show was over 5,400 people from over 80 countries, both figures exceeding the participation in the first two shows. The show also saw growth in the number of exhibitors (231) and the number of aircraft displayed on the show floor (23).

"We are proud that the European community recognises this is the premier rotorcraft event in the region," says Eduardo Consejo, President, Asociación de Trabajos Aéreos y de Emergencias (ATAIRE) the Spanish Helicopter Association hosting the event. "We understand the exhibitors were extremely pleased with the quality of visitors coming to see them, including those qualified to sign agreements on the spot. One of the goals of the show is to facilitate business between companies and buyers, and the data shows that the Madrid show met that challenge."

During the opening ceremony for EUROPEAN ROTORS 2023, outgoing EHA Chair Christian Müller announced that EUROPEAN ROTORS 2024 will be held in Amsterdam, Netherlands, next November 04 - 07. "One of our roles at EHA is to promote our vibrant industry throughout all European regions and countries," says Isabella Abbate, Executive Director of EHA. "Holding the shows in different locations occasionally allows us to support and highlight the dynamic ways our industry serves the people of Europe."



Rotorhub (HMG) were covering the Show Daily publications at the event

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#### **NOT PERFECT**

In the early paragraphs of this report, I suggested that the organisers faced issues in the nomadic path chosen for European Rotors, and there were problems albeit few and major.

As I have found in the past with the far smaller PAvCon Europe conference and exhibition, each new venue presents its own challenges and learning curve that staying at one venue year in and year out tend to put to one side.

For all their experience it seems that the HAI organising team were caught out by Spain, the venue and the budget. In fairness I found Spain a logistic problem (not quite a nightmare) at this year's PAvCon Europe in Bilbao and I know that decades ago Helitech Portugal foundered for similar reasons. I think it can be simplified by saying that some elements of the host nation may well not understand aviation events.

As soon as I arrived in the venue on the second exhibition day it was obvious that many of the exhibitors, although happy with the business they were attracting, had gripes about the organisation. I had entered the hall without a press ticket and there were no security checks or tally of who was entering and leaving. The lanyards and badge holders had already run out and although I saw a few being carried, there was no sign of the usually plentiful complimentary cloth bags being handed out. Something had seriously gone wrong with the usual slick entry process, and we might presume that actual attendance at the event will never be more than a guess. Certainly, there was little evidence of the promised "dynamic show floor in Madrid."

The biggest complaint was about the state of the floor of the hall. Each of the stands was carpeted but the expansive areas in between were quite industrial, plain concrete and many loose steel access panels with dangerous lift holes in them that had reportedly already snapped a high heel or two – fortunately without injury to those involved. It is reported that the cause of this oversight was a lack of finance to fund the acres of carpet required. It would have been very expensive, but having the holes covered should have been a priority. It is not unusual for venues to be carpet less (certainly there is no carpet at PAvCon), but at least safety needs to be addressed even if it is only with Duct/Gaffa Tape.



Next year the event moves to the familiar surroundings of the RAI in Amsterdam. The last European Helitech was based there in 2018 and since then the halls have undergone a refurbishment so the silly omissions in the Spanish venue should not arise again.

