©Police Aviation Research Special Edition June 2013 PAvCon Police Aviation Conference



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SCENE SETTING

The fifth PAvCon Police Aviation Conference was held in the Museum Aviaticum, Wiener Neustadt, Austria on May 21-22, 2013. The nominally neutral location masked the fact that the event was a new and untried formula effectively in the grounds of an police aviation sector manufacturer and that many 'guests' were going to be other like minded manufacturers – and mostly rivals.

At the planning stage there were some misgivings over whether the established and successful conference and exhibition formula would lend itself to attract industry members to operate within 'enemy territory' but with hindsight it can now be agreed that it went off remarkably well.

Earlier editions of PAvCon have been held in a London hotel [2009], a small Czech air show [2010] and police complexes in Spain and Germany [2011 and 2012] so residing with a manufacturer in 2013 seemed edgy territory and other options were researched before deciding upon what appeared to be the risk option. Two other similar offers from industry were considered but placed to one side.

The airfield at Wiener Neustadt, the oldest in Austria, is owned by Diamond Aircraft and they were in effect the host company although the vast majority of the planning, the potentially sticky bits, was as usual undertaken independently by PAvCon. The Museum Aviaticum is independently run but it sits on Diamond Aircraft land, it did however prove to be a magnificent backdrop venue for an aviation event on neutral territory. The artefacts are a mixture of original and replica items telling the story of the town and Austrian aviation in war and peace. There is little modern heavy metal, just a handful of aero engines with the aircraft being gliders, balloons and early replicas. The prize exhibit is a Messerschmitt Bf109 representing the hundreds of this type built on the airfield during the 1939-45 war. There is no old architecture – the production plant attracted a significant degree of attention by Allied bomber aircraft.



PAvCon 2013



PAvCon events are primarily about the people.

Bring together police aviators from many different nations and it soon becomes clear that there are more similarities than there are differences. Fortunately, no matter how broken, English is a common language.

Top: ALEA in Europe Joseba Mendizabal [Bilbao, Spain] and three former US police aviators Carl Crenshaw [California now with Bell Helicopter], Ken Solosky and Glenn Daley [both formerly with New York].

Right: Three officers from the KLPD in the Netherlands and another from Austria discuss the finer points of the differences between the EC135s operated by each.



PAvCon 2013

THE EVENT

There was an expectation that around 25 exhibitors might attend the event and a hope that all of the major manufacturers would be there. All three major helicopter manufacturers [AgustaWestland, Bell and Eurocopter] were there and two of them had aircraft in the static park. Among the fixed wing fraternity there was of course a preponderance of aircraft from Diamond Aircraft, but thanks to agents, mainly locally based Airborne Technologies, there were airframes from Tecnam and Vulcanair present, FLIR brought a Pilatus PC-12 and L3 Wescam nearly brought a Cessna 208. The arrival of the latter was initially thwarted by bad weather en-route in the French Alps and then an assignment. Some of the exhibits were first and foremost operational machines and subject to the needs of their primary task.

The event commenced with a factory tour which it appears was of interest to virtually everyone. Tours of modern production lines are a rarity and the type specific processes to be found within both the engine and airframe were instructional to all. In the airframe production plant are mock-ups of a number of yet to fly projects that may yet prove to be little more than future artefacts within the Museum Aviaticum. Diamond Aircraft is an innovative company and their skills were on show.



In addition to the factory tour of the production facilities and the Austro engine works a total of eight Diamond aircraft were directly available for inspection by the delegates at various times and nine others of various manufacturers were also on hand, although only eight were on the assigned static area at any one time. I do not expect to see such an extensive static display at a PAvCon again in a hurry – but this year was also unexpected. Three of these airframes were flown in at various times by the Ministry of the Interior [BMI], the police, an EC135, an AS355N and the last Bell 206 on strength, the latter pair did not stay long but they did illustrate the contrasting levels of equipment within the police fleet. Only the EC135 was fully role equipped, the other pair being configured for utility and training respectively.



PAvCon 2013



Fixed wing surveillance was the main theme of the static display, Diamond held sway simply because the grass and concrete outside had dozens of the marque parked up, but the true surveillance airframes – arguably the likely line of interest of the police delegates – was restricted to a handful of variations of the DA-42. The Tecnam MMA is now familiar and a similar Indra example was at last year's event at Hangelar, the Swiss registered Vulcanair Aviator represented a viable alternative to the police P68 Observer exhibited at Hangelar. For the future one Diamond prototype was of particular interest although it was simply a flying test bed. The DA-52 [top left] will offer a larger seven seat cabin to the GA industry in a year or so, also important is that the cabin will overcome one area of criticism faced by the DA-42. The four seat type can only really fly with two crew in fairly cramped conditions; the DA-52 will allow an extra sensor operator and space to move and is tipped to take on the majority of future surveillance sales.

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Views from the event—Clockwise: Bell 429 with the museum beyond, Local television interest in the event, the PC-12 arrives on the first day as the local air ambulance returns to its base, planning the day 2 demonstration on the eve of the event, a break from setting up the hall, the Chairman Gareth Davies and two exhibitors, the Tecnam MMA attracts attention from US and Australian attendees.





INDOOR EXHIBITS

The exhibition area was close – too close – to the conference and basic. The core idea is that exhibitors work on their feet often only backed up by a simple pop-up display, a table and chairs. It is supposed to be product presentation at its most basic but human nature inevitably requires a different tack and the majority wanted electric power to drive their product presentations – there's no shortage of VDUs and the flight-line was also uncomfortably close at times! That led to a lesson learned, the general hubbub of equipment and people was intruding on the conference sessions and needs to be avoided in future.

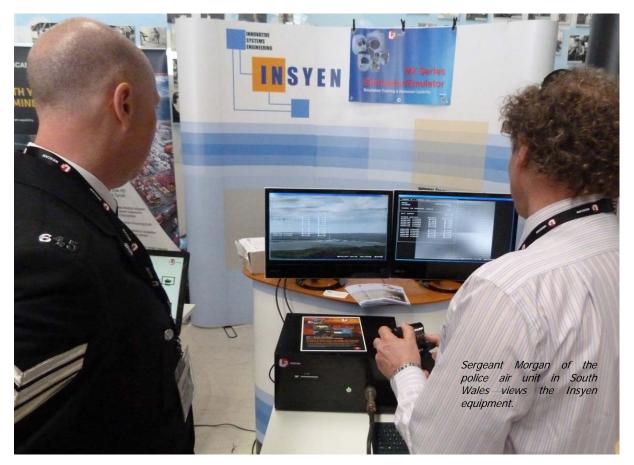
In terms of products there was perhaps just one true newcomer to the indoor exhibits. Insyen have a background in the space business, conventional aviation is a new arena for them.

They were exhibiting an innovative training device for the operators of sensors. This has been snapped up by L-3 Wescam for their sensor range.

Where the equipment is innovative compared to earlier training devices is that it does not actually use a sensor. Most previous training was undertaken via a device using a real sensor – either on an operational aircraft or in a training scenario – indeed an industry has grown up around that need simply to provide ground power to serve training needs. It is thought that many users are not exploring the full spectrum of training options simply because in the back of the users mind is the worry that any errors might damage the expensive device.

The Insyen device uses a real hand controller but at that point reality halts. Thanks to the availability of sophisticated graphics cards the trainee is able to fully explore the output of the hand controller without fear of damaging anything expensive.

Although the device is not in itself simple if there is a seemingly dire outcome to the control inputs you simply reboot the device and start again.



Police Aviation Conference

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The resultant images on the screens may not even look 100% like the real thing but they are a very good representation and of course fully variable to suit the training need. With the real thing you may have to wait a long time for snow, fog or desert like heat - this device inputs them on demand and in that more readily reflects a true flight simulator in its ability to expand and test the ability of the trainee.

The device attracted significant interest from a wide range of attendees and underscored the safe use argument in the willingness of a range of wholly untrained users to actually take part in the demonstration 'training' despite lacking skills.

On a different tack similar levels of interest was shown in the mapping solutions offered by such as Churchill and Honeywell/Skyforce. With operators increasingly finding crews unfamiliar with the locality on operations the gap between old fashioned local knowledge and reality grows daily. Road information overlays now being offered bridge that gap.

The Windows based Churchill system has now thrown down a challenge to the pre-existing mapping solutions as illustrated by Honey/Skyforce. Although their existing mapping system does provide road name guidance for the unfamiliar flight officer the style of the Churchill presentation has clearly ticked some additional boxes that they too will have to address.

There are four significant aviation companies based at Weiner Neustadt, Diamond and Austro Engines are separate entities but effectively the same company, Airborne Technologies an airframe completions company significant in the surveillance and police market and Schiebel the manufacturers of the S-100 helicopter UAV. The latter chose not to attend PAvCon as they believed it was not their core market but at least one disappointed potential customer was driven over to their facility to make contact. Just goes to show that none of us really know where the unmanned market is and it would have been useful to have seen just a little bit of interest on their part in their own backyard. It may



just be that Schiebel feels they have enough business in the military sphere – after all the product appears in the strangest of places. The latest is a story that one S-100 was shot down in Somalia as a 'US UAV' Schiebel and the Israelis are among the few innovative manufacturers of unmanned craft that appear to be making a mark. That said they are generally way outside the budgets of all but national air units.

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SPEAKING PARTS

The number of nations whose internal security forces have attended PAvCon over the years grew by three this year, the new nations attending being Israel, Macedonia and Nigeria. That makes the police aviation conference event experienced by at least 36 nations and many of them enthusiastically return time and time again.

The welcoming Keynote speech was given on behalf of the Austrian Police by Werner Senn the Head of the Flight Police. [right and above].

As ever there were excellent knowledgeable police speakers from the United States – each by default representing the Airborne Law Enforcement Association [ALEA] although the organisation itself has not got its act together to actually return to attend just yet. As the event has always been modelled on an ALEA Regional that is as ever a pity.

Despite growing interest from outside the region Europe is the focus of PAvCon and attracts police speakers from Austria, Spain and the United Kingdom. Both Spain and the UK took



Werner Senn

PAvCon 2013

two spots each, the latter saw presentations from the future in NPAS and the old in South Wales – an area destined to be sucked into the new national body next month. Wales presented upon the 2012 Olympics so it was a timely swansong of an appearance.

It is difficult to theme events of this sort, no matter what the theme there will always be a diversion from the core thread over twenty or so presentations. Crew Resource Management [CRM] remains a common thread of interest and that was evident in a number of presentations. The safe flight promotion highlights were perhaps the analysis of the accident that befell the AgustaWestland A109E Power in New Mexico and a similar review of an engine failure in a single engine Eurocopter AS350 over California. These presentations are pulled straight from the instructional classes at the ALEA and have been heard before by different audiences on other continents—that does not in any way diminish their message to a new audience. The US speakers each have a full and varied repertoire of instructional, thought provoking presentations that will provide a core of information to future PAvCon's

for years to come. In many cases it is not the specific content of the that presentation brings the rewards to the event it is the subsequent personal interaction over coffee.



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This was a commercial venture, no one was in it for nothing but thanks are due to a host of people from Wiener Neustadt for injecting enthusiasm into what was for most of them an unfamiliar working formula. Thanks too to the attendees, the exhibitors and delegates, for reflecting that atmosphere. Unlike many conferences PAvCon has retained at its core a chance for all attendees to interact – to Network - from dawn to dusk and way beyond. Too many events reach the final presentation of the day and lose the plot – they release the delegates to go their own ways for evening meals and drinks losing hours of opportunity to get to know customers, rivals and suppliers, their needs and their aspirations.

This year the adjoining Katana Café hosted the majority of the 'non-stop food and drink' opportunities of PAvCon. It was PAvCon that nominally picked up the cost of the three days but the owner of Diamond Aircraft, Christian Dries, hosted an evening reception on Day 1. Great meals and discussions were also experienced in the other airfield eating houses, the Tower and Hollers, over the days immediately preceding and following the conference.

There is a full year to go yet but plans are in place for a PAvCon to take place in Belgium in June 2014 and for a smaller event to be held in the United Kingdom during October 2014. Both are subject to final agreements between parties but it is expected that they will carry on the now well appreciated PAvCon formula.



Commercial Exhibitors at PAvCon in 2013

AgustaWestland Helicopters, Airborne Technologies GmbH, Austro Engine, Bell Helicopter, Broadcast Microwave Systems Euro GmbH., Cassidian Optronics, Churchill Navigation, Elektronic CARLS, Cobham, Diamond Aircraft/Diamond Sensing, Enterprise Control Systems Ltd., Eurocopter, FLIR Systems, Honeywell [Skyforce], Horizon Technologies Consultants Ltd., Insyen, L3 Wescam, PAR, RDDS Avionics Limited, Revue Thommen AG, Rohde & Schwarz, Scotty Group Austria, Spectrolab, Tucom GmbH, Turbomeca Germany GmbH, Vulcanair SA.

AIRCRAFT AT WIENER NEUSTADT

Bell 206 Austrian Police OE-BXT Bell 429 Air Zermatt/Bell Helicopter HB-ZSU Bolkow BO105 Airborne Technologies. Former German military used for product display. Diamond Aircraft DA42 [Diamond factory] OE-FBG Diamond Aircraft DA42 [Diamond/Rohde & Schwartz] OE-FMF Diamond Aircraft DA42 MPP [Diamond factory] OE-FMV Diamond Aircraft DA42 [Diamond factory] OE-VDK Diamond Aircraft DA42 [Diamond factory] OE-FDA Diamond Aircraft DA42 [Diamond factory] Swiss military registered, optionally unmanned. Diamond Aircraft DA52 [Diamond factory] OE-V52 Prototype Diamond Aircraft HK-36 TTC Eco Super Dimona surveillance [Diamond factory] OE-9483 Eurocopter AS355N Austrian Police OE-BXD Eurocopter EC135T2 Austrian Police OE-BXC Eurocopter EC135T2 OAMTC OE-XEQ Pilatus PC-12 FLIR Systems N812FS Tecnam MMA Airborne Technologies OE-FMG Vulcanair Aviator Airborne Technologies/Vulcanair HB-LRZ

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