

IN BRIEF

TECHNOLOGY

EU funding to support air traffic system studies

Honeywell (Hall 1, A9) is opening a new aerospace centre of technology in the Czech capital, Prague. Bob Smith, the US company's head of advanced technology, says the country has a wealth of talent and lies at the heart of the European aerospace industry which is continuing to thrive. "The EU is developing some valuable, unique technologies," he said. "We are building on a highly successful EGPWS heritage and RAAS with a next-generation runway collision awareness system. We are also talking to OEMs and the pilot community about assisted recovery."

Smith also says the company is expanding its navigation portfolio. "GPS is like looking at a 100watt lightbulb from 300 miles. We are working on a number of systems that will improve this."

New FMS chosen for Canadian H-92 helicopter

CMC Electronics (Hall 4, C16A) is showing its new CMA-4000 Flight Management and Display System for the first time. The CMA-4000 offers a CDU/FMS, a mission computer and a display management system in a single box. The single box offers FMS/Global Air Traffic Management, centralised radio management, digital map generation, terrain awareness and warning and symbol generation for MFDs and video formatting. A derivative of this system has already been selected for the Canadian H-92 Maritime Helicopter Project.

Honeywell display cleared on Airbus

Honeywell (Hall 1, A9) has received certification for its multipurpose control display unit (MCDU) for the flight management system (FMS) on the Airbus A320 and A340 aircraft. Greg Albert, vice-president, Airbus customer business team, Honeywell Aerospace, says: "This LCD MCDU is intermixable with existing CRT MCDUs and provides faster response and improved readability. It is the only Airbus LCD MCDU available with video feed."

Elbit UAV range soars with super Skylark

Brendan Gallagher

Israel's Elbit (Hall 1, C17) is here with a full hand of unmanned aerial vehicles, including the new, bigger version Skylark.

Dominating the company's stand in Hall 1, Skylark II is a short-range – 50km-radius – tactical UAV designed to provide intelligence, surveillance, target acquisition and reconnaissance for both military and homeland defence forces. It can operate by night and day and in bad weather and can be launched and recovered by two crew.

In flight the Skylark II is capable of a high degree of autonomy and can perform all the flight and mission modes of the larger Hermes 450, which is on show in the static park. Elbit

describes the new UAV's propulsion system as silent, lightweight and highly efficient, allowing low-altitude covert flights with little risk of exposure. A gimballed and stabilised sensor payload comprises a colour charge-coupled device (CCD) day camera, a thermal-imaging night camera and a laser illuminator.

Alongside the new UAV at the Elbit stand is the smaller, hand-launched Skylark. Designed for tactical close-range "over-the-hill" surveillance and reconnaissance, perimeter security, convoy escort, force protection and artillery fire adjustment, Skylark has been selected for the Israel Defence Forces (IDF) Ground Forces and numerous military and paramilitary forces world-



Elbit's Hermes 450 forms the basis of the UK's Watchkeeper UAV programme.

wide. It has performed over 1,700 operational sorties.

An even more seasoned performer is Elbit's long-endurance Hermes 450, which has accumulated more than 45,000 flight hours. It's the backbone of the Israeli UAV fleet and has been selected for the UK's Watchkeeper programme. The payload on the example

here comprises the Compact Multi-Purpose Advanced Stabilised System (CoMPASS) day/night sensor, the Thales I-Master synthetic-aperture radar, the Elisra AES-210 Emerald electronic support measures and electronic intelligence system, and a communications intelligence and jamming system from Tadiran.

CoMPASS is produced by Elbit subsidiary Elop and is used in attack and search-and-rescue helicopters, maritime patrol aircraft, UAVs, patrol and missile boats and ground vehicles. It has been selected for Watchkeeper and on the eve of the show Elop announced new contracts worth \$15 million.



New, bigger Skylark II model on show on Elbit's stand.

FRENCH KEEP WATCH ON THALES UAV SURVEILLANCE SYSTEM

European defence company Thales is optimistic it will soon land a deal from the French government for its Watchkeeper UAV-based intelligence, surveillance, target acquisition and reconnaissance (ISTAR) system.

"I've been getting a lot of French visitors lately," Alex Cresswell, Thales Aerospace VP for ISTAR and UAV systems, said at the show. [MONDAY] "I feel a great deal of optimism that this could turn into a French commitment to a Watchkeeper-style solution."

Cresswell confirmed that French defence acquisition agency DGA had been

in regular contact with Thales and the British Ministry of Defence, "seeking to understand how they decided on the Watchkeeper solution. Their interest is very strong indeed."

The Watchkeeper contract was awarded to Thales under a £700 million (\$1.27 billion) contract 12 months ago. Since then Thales has subcontracted UtacS, a Thales/Elbit joint venture based in Leicester, to develop core tactical UAV systems under an agreement worth £317m. Israeli company Elbit's Hermes 450 has been chosen to form the basis of Watchkeeper's WK450 air vehicle.

Iridium doubles up customer base

Mobile satellite operator Iridium, represented here by manufacturing partner International Communications Group (ICG – Hall 4, C9b), says its aviation customer base has more than doubled over the past 12 months.

By June, the installed base of aeronautical terminals had topped 7,500, with an average of more than 300 new units being commissioned every month.

While voice telephony still represents a large percentage of the company's overall traffic, data traffic is increasing twice as fast. "We expect to see significant growth in the use of Iridium for flight-following, messaging, remote systems monitoring and out-off-on-in (OOOI) reporting," says executive vice-president Don Thoma.

"There is also increasing

interest from passenger carriers in operational and safety communications on long-distance overwater routes, as well as passenger phone and email services."

At the beginning of this year, El Al launched the first Iridium-based passenger service, offering prepaid calling cards on its Boeing 767s. Bombardier also installs Iridium terminals on its other Challenger models and the Global

5000, Global Express and Learjet range.

Other recent Iridium-community achievements include the installation of terminals to provide voice and data communications aboard the New York Air National Guard's fleet of Antarctic support C-130 Hercules, and sales to Gulf of Mexico operator Era Helicopters, the air rescue services of Germany and Luxembourg.



Iridium Systems help US Antarctic support C-130s to stay in contact.

Rockwell system tees up Dreamliner control testing

Rockwell Collins (Hall 4, F10) has delivered its first fully operational pilot control system to Boeing for the 787 Dreamliner aircraft.

The system will be used to develop an integrated test vehicle to ensure all 787 flight controls systems are functional, before building the actual aircraft.

The controls include the throttle, speed brake, flap control modules, pitch, roll and yaw primary pilot controls and their interfaces to the aircraft's fly-by-wire system.

Rockwell Collins will also supply the flightdeck display system and crew alerting system, communication and surveillance systems, core network and the aircraft's common data network.

Kelly Ortberg, vice-president and general manager of



air transport systems for Rockwell Collins, says: "The 787's pilot control system provides capabilities to enhance safety and performance, and offers operational commonality with other Boeing flightdecks. We are proud to be part of yet another important milestone in bringing the 787 Dreamliner closer to reality."