

AIR NAVIGATION SERVICES NEWS

Sweden's Luftfartsverket (LFV) has selected Sensis Corporation's VeeLo NextGen™ vehicle locator unit for Stockholm Arlanda International Airport. LFV will deploy VeeLo NextGen on vehicles operating on Arlanda's runways and taxiways to enhance air traffic controllers' situational awareness of surface operations and reduce the risk of runway incursions. The agreement includes the purchase of up to 160 VeeLo NextGens, along with support, maintenance and training services over a two-year period. VeeLo NextGen obtains its location from a Satellite-Based Augmentation System (SBAS)-enabled Global Positioning System (GPS) receiver and broadcasts its location and identity using the Mode S Extended Squitter Automatic Dependent Surveillance – Broadcast (ADS-B) message format. The VeeLo NextGen's rugged, weather-resistant enclosure can be temporarily or permanently mounted on the exterior of an airport surface vehicle. "VeeLo NextGen has the unique ability to automatically shut off transmission when the vehicle exits a predetermined operating area," said Marc Viggiano, chief operating officer of Sensis Corporation. "This enables air navigation service providers to better manage limited broadcast spectrum." -- Ten ANSPs have selected Sensis VeeLo NextGen for deployment at more than twelve airports across four continents. #871.ATC1

Era's MSS ADS-B and multilateration surveillance solution for the Irish Aviation Authority (IAA) has been successfully installed at Dublin Airport and is now in full operational use. The solution uses strategically placed sensors to provide extended coverage of runways, taxiways and aprons, improved automation of aircraft identification and enhanced surveillance in all weather conditions. With the cost and limitations of traditional radar, the IAA determined that multilateration would provide the best surveillance, as it would seamlessly support its advanced-movement guidance and control system (A-SMGCS), as well as allow for the flexibility of future airport growth. "Dublin, like many airports around the world, was faced with the challenge of implementing a surveillance system at a rapidly changing and expanding airport," said Era Systems Corporation Senior Vice President, Kevin Layton. "Due to the scalability of Era's multilateration system, Dublin was able to implement a surveillance system that, at any time in the future, can be modified to provide additional surveillance coverage." -- The deployment in Dublin follows several recent successful Era installations, including systems in Jamaica, Indonesia, Germany, Malaysia and China. #871.ATC2

TriaGnoSys has announced the completion of its air traffic management (ATM) communications suite, a mobile aeronautical communication network based on Internet technologies for cockpit and cabin services, which seamlessly integrates satellite and terrestrial data links. The technology was developed as part of the EU-funded Networking the Sky (NEWSKY) project to manage the huge growth in air traffic, which is forecast to double by 2025, according to Eurocontrol figures. At the conclusion of the NEWSKY project, TriaGnoSys demonstrated its communications suite using a simulated flight from Europe to the U.S. Throughout the flight, either a terrestrial or a satellite link was automatically selected, depending on operational preferences and the availability of links, resulting in a seamless handover between the networks ensuring session continuity. Markus Werner, Managing Director of TriaGnoSys, said: "There are two key benefits to this system. The

first is that aircraft can now remain in constant contact with air traffic management. The second is that it provides both airlines and air traffic managers with the flexibility to use the most appropriate communications link, based on a number of factors, including availability, cost and convenience.”

The work carried out under NEWSKY forms the basis for new EU research, Seamless Aeronautical Networking through integration of Data links, Radios, and Antennas (SANDRA). SANDRA will develop a communications system to support increased route efficiencies by improving ATM, integrated with passenger Internet connectivity and enhanced cabin communications. The core elements of the SANDRA test-bed software will be used in flight trials, planned for 2013. Within the new project, TriaGnoSys has overall responsibility for the test-bed integration and validation, software development, including software architecture definition, quality assurance, procurement of test-bed hardware, and performing laboratory trials. #871.ATC3

SELEX Sistemi Integrati has presented the first results of SWIM SUIT (System Wide Information Management Supported by Innovative Technologies), a European research and development project in the air traffic control field. SWIM-SUIT is a 36-month study, born within the VI Framework programme of the European Union, and represents one of the SESAR programme technological pillars for the realization of a common information network to manage information, as requested by the Single European Sky (SAS). SWIM SUIT's main achievement will be the creation of a system to manage a global network and share data among all the main air traffic management operators within the European space. The principal stakeholders of the project are national service providers, airlines, airports, meteorological centres. The project will allow them to overcome their present barriers by the creation of all necessary infrastructures to integrate all kind of information. SWIM-SUIT, which has a value of EUR 12 million, can rely on a contribution of about 50% from the European Commission Directorate General for Energy and Transport. The project is managed by a consortium driven by SELEX Sistemi Integrati, and includes several partners such as industries, airways, national service providers and research centres all over Europe. #871.ATC4

Thales Air Traffic Management has successfully delivered its FLOWCAT Air Traffic Flow Management (ATFM) system to South Africa's Air Traffic & Navigation Services (ATNS). The ATNS Centralized Airspace Management Unit (CAMU) operates the FLOWCAT system enabling seamless airspace, air traffic flow, and capacity management. A world first, FLOWCAT ensures ATNS will meet current and future airspace user demands, reducing the environmental impact of aviation through the provision of User Preferred Routes and air traffic flight path optimisation. The collaborative system will also deliver significant benefits to airlines, enabling reductions in operating costs. The FLOWCAT system has been delivered to ATNS CAMU to facilitate the necessary regional collaboration necessary to manage the significant traffic demand expected for the upcoming 2010 football World Cup. #871.ATC5

At the recent UN conference on climate change in Copenhagen, IATA called for a global sectoral approach for aviation and climate change under the leadership of ICAO. The call was made by Giovanni Bisignani, IATA's Director General, in the sixth annual Dr. Assad Kotaite Lecture, hosted by the Royal Aeronautical Society in Montreal in early December 2009. Bisignani identified environmental responsibility as a top priority for aviation, alongside safety and security.

The IATA said that the aviation industry is globally united with a commitment to stabilize emissions with carbon neutral growth from 2020 and a 50% net reduction in carbon emissions by 2050. "Aviation is a global industry that moves with global standards," Bisignani said. "Our commitment to reducing emissions includes all the value chain - manufacturers, airports, air navigation service providers and airlines - and crosses all geographies." Aviation, he said, will be the only industry bringing a global solution to Copenhagen. A global sectoral approach would account for aviation's carbon emissions at a global level as an industrial sector, not by state. This would ensure that aviation is fully accountable for its emissions and, through access to global carbon markets, would pay for its emissions once, not several times over. #871.ATC6

The Euromed Aviation Projects main mission is to prepare the way for the creation of a Euro-Mediterranean Common Aviation Area (EMCAA), as decided by the Euro-Med Transport Ministers in 2005 and outlined in the 2007 Regional Transport Action Plan (RTAP) for the Mediterranean. It aims at creating a 'road map' for the implementation of the EMCAA. Euromed Aviation seeks to establish an open, healthy and competitive aviation market, promote improved aviation safety, security and environmental friendliness of air transport and works to boost regional air traffic management cooperation and harmonization. Its aim is to promote the emergence of a Euro-Mediterranean Common Aviation Area and facilitate any future negotiations of comprehensive Euro-Mediterranean Aviation Agreements. It also seeks to reinforce air transport cooperation and improve aviation safety and security in the beneficiary countries. #871.ATC7

Raytheon Company has been awarded a contract by the United Kingdom's NATS to conduct software modelling and field trials of technology that minimizes the effects of wind turbines on radar signals. "We are developing this much needed technology with NATS to eliminate potential radar blackout zones near wind farms and enable the U.K. to continue its progress in developing safe, renewable energy resources," said Andy Zogg, Raytheon Network Centric Systems vice president of Command and Control Systems. Wind farm turbines create a Doppler effect as they rotate, creating a potential radar blackout zone. The Raytheon solution uses hardware and software to detect the turbines on radar systems, which eliminates interference with radar displays. Under the USD 6.5 million contract, Raytheon will develop and test advanced mitigation algorithms within its S-band approach and L-band en route primary surveillance radars. Raytheon will also develop and test advanced post-processing tracking algorithms, along with a full PSR modelling and simulation capability that validates enhancements and serves as a tool for rapid development of future improvements. System testing will take place in the U.K. and the Netherlands. #871.ATC8

The U.S. FAA is soliciting bids for NextGen support contracts with a combined value of around USD 7 billion, the largest award in the agency's history. The FAA will issue as many as five separate contracts for research and development and systems engineering work that will help the agency deliver NextGen. They will come under an umbrella programme called System Engineering 2020. It said it plans to award five-year contracts in summer 2010 that will include options to extend to as long as 10 years. In a statement, the FAA said: "SE2020 contracts will be awarded to teams of companies, up to three of which will perform research and development work and two of which will perform systems engineering work." It said the work will complement and enhance major NextGen initiatives already

underway, including ADS-B. Operational capabilities covered under SE2020 will include Trajectory Based Operations, Collaborative Air Traffic Management and Reduced Weather Impact. #871.ATC9

Italy's Air Navigation Service Provider (ANSP), ENAV SpA, is undertaking a major project to upgrade the country's Air traffic Management (ATM) infrastructure. The Italy Integration of Communication and Surveillance (IP1) project is designed to remove current major shortcomings in capacity and safety to ensure maximum flight efficiency gains, while maintaining the traditional concept of operation, based mainly on airspace management. The project, which began in May 2009, is scheduled for completion by May 2011 at a cost of EUR 20.24 million. IP1 will address the implementation of infrastructure upgrades ahead of the deployment of the next generation of ATM systems. The project is part of a trans-European project to support the early introduction of ATM Network infrastructure improvements and synchronized investment in air-ground infrastructure under the framework of the SESAR (Single European Sky ATM Research) Master Plan. #871.ATC10

GE Aviation Systems recently joined an industry consortium dedicated to advancing emerging technologies and services in order to bridge today's air transportation system with tomorrow's next generation air travel and commerce needs. By signing a Memorandum of Understanding on 16 October 2009, GE Aviation became the newest member of the Integrated Airport Initiative. A government-industry partnership, the initiative focuses on operational improvements important to Next Generation Air Transportation System (NextGen) strategies. Work conducted through the initiative forms a key component of the U.S. FAA's NextGen test bed with Embry-Riddle Aeronautical University in Daytona Beach, FL. Formed in 2006, Integrated Airport Initiative industry members currently include lead participant Lockheed Martin, plus Barco Inc., Boeing, Computer Sciences Corporation (CSC), Embry-Riddle Aeronautical University, ENSCO Inc., Frequentis USA, Harris Corporation, Mosaic ATM, NATS Services, Sensis Corporation, and the Volpe Center.

Joint research and demonstrations focusing on near- and mid-term National Airspace System (NAS) solutions are core competencies for the group. Challenges addressed by the initiative include trajectory-based operations, high density airports, reducing the impact of weather on operations, collaborative air traffic management, and integration of Unmanned Air Systems (UAS) in civil airspace. The MOU represents the collaboration between member companies, although it is not an obligation for the parties to pursue subsequent procurement opportunities that may be offered by the FAA other than to discuss whether teaming may be appropriate on any program that results from the Integrated Airport Initiative work products. #871.ATC11

Northrop Grumman Park Air Systems has received two prestigious key supplier performance awards from Nav Canada in recognition of its outstanding support to Nav Canada's operations during 2009. This is the seventh consecutive year that the company has received a Supplier Excellence Award from Nav Canada. Around 2000 eligible supplier companies were assessed in 2009, from which six were selected for a Supplier Excellence Award. Nav Canada commented in their supplier performance report: "Park Air Systems has an excellent instrument landing system (ILS) product, an excellent customer service approach and an excellent track record in past ILS contracts with Nav Canada." The two Park Air Systems operations achieved the highest ratings across each of the six key

areas assessed by Nav Canada in its Supplier Performance Management Programme, recording a 30% improvement over the previous year's performance. #871.ATC12

* Northrop Grumman Park Air Systems has added Voice over Internet Protocol (VoIP) capability to its range of air traffic management radios. The VoIP standards, which have been specifically developed to meet the demands of the air traffic management (ATM) environment, will be available on all of the company's PAE T6 range of VHF and UHF radios with immediate effect. In March 2009, Northrop Grumman Park Air Systems joined 10 other manufacturers of air traffic communication systems to confirm that the specifications, which were developed by the European Organisation for Civil Aviation Equipment (EUROCAE) Working Group 67, provided a robust standard that allowed the interworking of ground radios and voice communication systems. #871.ATC13

Some of the UAE's neighbours are not fully prepared to cope with the expected surge in regional air traffic over the next decade, according to Majdi Sabri, IATA's Vice President for the Middle East and North Africa region. He said that more advanced systems were needed throughout the Gulf region as its air traffic continues to expand. While the UAE already has advanced air traffic control systems in place, allowing aircraft to fly closer together in safety, other countries in the region are behind. Without substantial investment, there is a risk that the expected rapid growth of flights in the region – the UAE is forecast to increase from 500 000 in 2008 to 1.4 million in 2020 - could lead to bottlenecks and an increased number of delays. Majdi Sabri said: "In this region, the infrastructure and air-traffic control procedures are not capable of managing growth. We have a very congested region, especially in the Gulf airspace."

UAE authorities have called on neighbouring countries to follow its lead. The UAE has introduced RNAV1, a navigation system that shrinks the size of airspace corridors from 16 km to 3.2 km, allowing more corridors around airports. Meanwhile, new systems and processes allow the UAE to fly two aircraft as little as 18.5 km apart, said Hassan Karam, Director of Air Navigation Services for the General Civil Aviation Authority (GCAA). #871.ATC14