

AIR NAVIGATION SERVICES NEWS

Italy's SELEX Sistemi Integrati has won a USD 8 million contract from the Ethiopian Civil Aviation Authority (ECAA) for the supply of surveillance radars and new-generation Automatic Dependent Surveillance - Broadcast (ADS-B) system. The order includes installation at Addis Ababa's recently renovated and expanded Bole International Airport of an S-Band solid-state ATCR-33S surveillance radar, co-mounted with a SIR-S Mode-S secondary radar. The complete system is designed to perform enhanced surveillance, with a dedicated vertical-aperture antenna (ALE-9) able to provide the most reliable flight data in a high-traffic density area. The turnkey system will be delivered and commissioned by SELEX by the end of 2009, and will include the necessary training courses and licensing of a first group of Ethiopian controllers.

A key element of this project is the SELEX Sistemi Integrati ADS-B system. The implementation of ADS-B in Ethiopia involves the deployment of several satellite-linked ground stations throughout the country, and will complement and extend nationwide upper-airspace radar coverage, as well as enhance air traffic management and flight safety. Bole International Airport will have a modern ATC centre equipped with the last version of SATCAS 2000, an open-architecture package, able to process and display on the high-resolution 2k x 2k CDS-2000 controller work positions real-time radar data integrated with the ADS-B data and flight data plans, providing the controllers with a unique picture which definitely improves the air situational awareness and airspace management. #855.ATC1

Ottawa-based Intelcan Technosystems has signed a contract with Roberts Flight Information Region (FIR) in West Africa to deliver communication and surveillance systems to enhance their service in the region. The ADS-B portion of this contract consists of two phases to provide five ADS-B ground stations, including a new station in Liberia, and will be completely integrated into Intelcan's existing SKYCONTROL ATM system. Roberts FIR is a co-operative Air Navigation Service Provider (ANSP) for the West African nations of Guinea, Sierra Leone, and Liberia. "We are proud to extend our surveillance services in Roberts FIR by introducing an ADS-B solution that provides exceptional coverage with low maintenance costs," said Intelcan Chief Executive Officer, Georges Ata. -- Intelcan has been working with Roberts FIR since 1980, when the co-operative air navigation service provider was started up. #855.ATC2

On 5 March 2009, SAAB Group and the Swedish ANSP LFV gave a live demonstration of their 'remote tower' concept at Malmö Airport. In the demonstration, a Swedish Coastguard aircraft was directed to take off from Angelholm Airport by a controller based at Malmö Airport, some 100 km away. Observing on a panoramic video screen linked to nine high-resolution cameras mounted on the control tower at Angelholm, the controller was able to watch the aircraft circle the airfield and then direct it in to land. The whole process was conducted remotely, with only a 1-second delay between the live event and the display on the screen. LFV's CEO, Thomas Allard, explained that Sweden was particularly suited to this technology as it has a large number of isolated airfields with relatively low traffic volumes. The benefits from being able to control airfields remotely had, therefore, been clear to LFV, and Saab had

been the only company prepared to make the speculative investment in the technology. The project is at the start of a three-year proof-of-concept stage. #855.ATC3

Major stakeholders of the world aviation community have signed a declaration calling for the rapid implementation of Performance-Based Navigation (PBN). Speaking on behalf of the group, the President of the ICAO Council, Roberto Kobeh González, emphasized that PBN will help reduce airport and airspace congestion, conserve fuel and protect the environment, reduce the impact of aircraft noise near airports, and ensure reliable, all-weather operations. PBN involves a major shift from conventional ground-based navigation aids and procedures to satellite-based navigation aids and area navigation procedures, which are more accurate and allow for shorter, more direct routes between two given points, as well as more efficient take-offs and landings. This reduces fuel burn, airport and airspace congestion, and aircraft emissions. The Declaration calls upon all leaders of the civil aviation community to actively implement PBN in accordance with ICAO provisions.

A co-ordinated action plan to assist States in the implementation of PBN has been drawn up and all ICAO regional offices have established PBN task forces. In support of worldwide seamless and harmonized implementation of air navigation systems around the world, the United States' Next Generation Air Transportation System (NextGen) and the European SESAR future air navigation systems are based upon the application of PBN and the ICAO Global Air Navigation Plan. #855.ATC4

Naverus Inc, a global leader in the development and implementation of Performance-based Navigation, has received certification under ISO 9001 for its quality management system. Naverus began the ISO 9001 certification process in October 2008, and received the certificate of registration in mid-April 2009 after successful completion of audits by BSI Management Systems, an accredited ISO 9001 registrar. Naverus CEO, Stephen Forte, said: "ISO 9001 registration provides our customers with reliable, independent validation that we conform to internationally recognized quality-management standards." Naverus worked with the management and environmental consulting firm Cavendish Scott to prepare for the ISO 9001 audit. #855.ATC5

CAAP (Civil Aviation Authority of the Philippines) has awarded a contract that would allow it to get connected to the European AIS Database EAD using Frequentis FR-AIS technology. The EAD service, established by 38 Eurocontrol member states and operational since 2003, has recently been joined by increasing numbers of non-European states. The contract award means that, by May 2009, CAAP will be participating in one of the most advanced AIS solutions currently available in the world. The procured FR-AIS system brings together a number of components selected on a 'best of kind' basis to form the integrated system. Advantages of the EAD service include the combination of a single database entity, advanced data verification and validation facilities, and the idea of real-time information sharing between ANSPs. Under the new contract, CAAP will be able to connect online on a 24/7 basis to all EAD services. CAAP will actively participate in EAD by providing AIS information to all participants, and will also be capable of adding and editing NOTAMs, AIPs, charts, and other static data of the Philippines, and make such accessible to all other EAD member countries. The project itself is primed by local company Integrated Energy Systems & Resources Inc (IESRI) who will handle the integration of all AIS components as well as various after-sales and support services. #855.ATC6

EADS Defence & Security (DS) has completed installation of an MSSR 2000 I Monopulse Secondary Surveillance Radar in the Philippines in association with Integrated Energy Systems & Resources Inc (IESRI). The Civil Aviation Authority of the Philippines (CAAP) officially accepted the MSSR in mid-March 2009. The MSSR 2000 I is the first of its kind to combine active Mode S interrogations with the passive reception of Automatic Dependent Surveillance - Broadcast (ADS-B) reports containing in particular the position of the aircraft, paving the way to a new generation of civil air traffic control. Thus, it increases the performance of the existing ATC equipment by interfacing a secondary radar of the latest generation with legacy multi radar tracking systems of CAAP. The project was completed in less than a year in order to replace existing equipment. "Air traffic control authorities all over the world are faced with a continually increasing air traffic density," explained Bernd Wenzler, CEO of Defence Electronics. "This situation requires a high-performance air traffic control system ensuring reliability, easily manageable logistics, and comprehensive data exchange." #855.ATC7

Telephonics trained ATC controllers from Macao at its recently-opened training and integration centre in New York. The trainees are due to use Telephonics' AeroTrac™ system which is being installed in Macao later in 2009. Exercises included simulated aircraft handoffs between Macao and other area control centres within the Pearl River Delta region. -- Telephonics has been active in the China aviation market since 1985 when it was awarded its first contract for an ATC system at Guangzhou International Airport. Additionally, in 1995, Telephonics began installation of its first AeroTrac ATM system in China. Since that time, Telephonics has installed over 15 additional AeroTrac systems throughout the country. #855.ATC8

HITT of the Netherlands has been selected by the Air Traffic Management Bureau of China to supply a ground surveillance safety system to Shanghai's Hongqiao International Airport, the second airport of Shanghai. The system will ensure a higher level of safety on the ground. Years ago, HITT delivered the first system of this kind to the new Shanghai-Pudong International Airport. With the system at Hongqiao, the Air Traffic Management Bureau of China and the Shanghai Airport Authority will be ensured safe and efficient control and management of aircraft at both Shanghai airports. -- The Chinese authorities are relying on HITT's systems for their most important airports in Beijing and Shanghai. Airports in China are developing fast and major international events such as the 2008 Olympic Games and the World Expo 2010 in Shanghai - hosting some 35 million visitors - are an impulse for additional investments in systems managing the safe and efficient traffic flow on airports. #855.ATC9

Harris Corporation has undertaken demonstrations of its advanced communications and information assurance solutions for the Global Positioning System (GPS) Operational Control Segment (OCX) programme. Total value of the contract to Harris if the Northrop team is selected in 2009 for the development phase, could exceed USD 100 million over the next 20 years. During the System Design Review, Harris presented a demonstration of a prototype advanced monitoring station. In 2007, Harris was awarded a USD 17 million contract by Northrop Grumman to develop the prototype monitoring stations and to design the initial communications infrastructure as part of Phase A of the pursuit. The system design review - held at Northrop Grumman facilities in Redondo Beach, California, with representatives of the U.S. Air Force and government GPS community in attendance - completed the last milestone for Phase A. -- Harris is a member of the Northrop Grumman Corporation team competing

for the next-generation ground control segment contract that will support the entire network of existing and future GPS satellites. #855.ATC10

The positive experience with Delair's 'sally stand/gate' resource management system at Vienna Airport has resulted in a order for the 'sally check-in' module. In addition to the optimized utilization of stands and gates offered by systems already installed, 'sally check-in' will help Vienna Airport to optimize the planning of its check-in counters. Both 'sally stand/gate' and the new check-in module feature a fast planning algorithm for the optimized utilization of resources as well as new web technologies. 'sally check-in' covers the specific requirements of a check-in planning including, for example, common check-in or check-in of bulky luggage. The module contains an assessment of demand of check-in counters whereby the customer specific classification numbers are considered. In addition, comprehensive analysis functions will be available which deliver online statistics regarding the resource occupancy at all times. 'sally' is part of Delair's A-CDM product family (Advanced Collaborative Decision Making). The products help to reduce fuel consumption, noise and pollutant emissions through reduced holdings, shorter flight times in the TMA (Terminal Maneuvering Area), shorter taxi times before take-off and optimized procedures. The product suite includes the A-CDM platform as the interface between Delair's applications and external systems, as well as other advanced planning tools. The advanced tools consist of the arrival and departure manager 'darts4D', which was developed in cooperation with DFS based on the DFS arrival manager '4DPlanner' and the departure manager 'darts' from Delair.
#855.ATC11

The AFPEX application is an integral part of the Extended Aeronautical Message Handling System (EAMS) which was supplied to the U.K.'s NATS in early 2008 by Comsoft GmbH. EAMS is based on the company's Aeronautical Data Access System CADAS. Site acceptance trials were completed successfully at the beginning of March 2008. Using AFPEX, users can now send or receive flight plans and other related aeronautical messages directly onto the AFTN network via the Internet, including acknowledgements and departure slots for IFR flights. More than 2000 users have signed up so far. Users can store frequently used routes and retrieve them from the system's database. NATS' Director Supply Chain & Facilities Management, Chris Odam, said: "The big success of the EAMS project is another milestone in NATS' strategy to apply latest information technologies to increase reliability and safety, whilst at the same time lowering the operational costs." In fact, safety and security has been one of the major aims of the EAMS project: a replica system has been installed at a remote contingency site in order to guarantee service continuity in case of catastrophic events. The CADAS product family includes Comsoft's advanced aeronautical terminal and database solutions such as AMHS and ATS User Terminals and integrated Aeronautical Information Management (iAIM) compliant to AIXM 5. #855.ATC12

With the proliferation of data networks, Voice over IP (VoIP) offers many attractions, not least among the Air Traffic Management (ATM) community. A recent interoperability testing event has helped to demonstrate the feasibility and robustness of VoIP for ATM, thus bringing the technology one step closer to deployment within the framework of the Single European Sky (SES) initiative. Interoperability between different Voice Communication Systems (VCS) and different Ground Radio Stations (GRS) is key to the success and safety of this technology. The second EUROCAE VoIP for ATM Plugtests interoperability event organized by ETSI during March and April 2009 has confirmed the robustness of the EUROCAE interworking specification (ED 137) for VCS and GRS. A total of eleven

equipment manufacturers participated in the event, as well as two European ANSPs attending as observers. Guy Potiron, Chairman of EUROCAE Working Group 67 (responsible for the specifications for VoIP for ATM), said: "The results of this second EUROCAE Plugtests Interoperability event on VoIP for ATM have demonstrated the advanced maturity of the very recently approved EUROCAE documents (EDs), allowing interoperability between ATM VoIP components (VCS and GRS). The event has also confirmed the efficiency of the ETSI Plugtests processes, means, tools and personnel for organizing and performing these types of tests, the good maturity of the draft developments by European ATM VoIP suppliers, and the excellent co-operation between all the ATM VoIP stakeholders (suppliers, ANSPs, ETSI, EUROCAE, and Eurocontrol)." A follow-up event is planned for September 2009, which will concentrate on ATM Gateways. #855.ATC13

Vitrociset has supplied and installed a D-VOR/DME system at Siena Airport. Vitrociset installed equipment manufactured by the U.S. subsidiary of Selex-SI. Vitrociset also reports selection of its radar controller training suite, called ATRES-APP by Italian service provider ENAV, in a separate contract award. ATRES-APP comprises two integrated and co-operating working positions, and Loquendo voice recognition system designed to train two air traffic controllers in stand-alone exercises, as well as joint exercises for inter-sector coordination. #855.ATC14

2008 was a very successful year for Frequentis, with the delivery of 1240 controller working positions for its core voice communication product: the VCS 3020X. This brings the total number of working positions supplied by the Austrian company to some 1000 in 75 countries. Frequentis continues to grow globally – in particular thanks to its suite of communication products, which also include VCX network solutions, back-up systems, and DIVOS recorders. This stable growth reinforces the company's position as a reliable partner for organizations seeking to master future challenges in air traffic management. Communication solutions remain the cornerstone of the company's business activities, despite accelerating sales of Frequentis tower automation and information systems. Continuous investment in production and development allows Frequentis to offer customers unique product features and future-proof solutions. The company's current focus is on helping the world's Air Navigation Service Providers meet the challenges posed by the global financial crisis - offering solutions and implementation models that reduce short- and medium-term operating costs with the built-in flexibility to address the long-term demand for capacity increases. Some examples: • Step-by-step upgrades of existing communication systems, with e.g. the new Frequentis hybrid TDM/IP working position (iPOS) or an integrated IP backup system; • Short-term network cost savings with VCX network solutions; • Modular product architectures supporting step-by-step rollout of communication projects; • Added-value VCX gateway solutions protecting existing investments (e.g. implementation of interlinks based on EUROCAE Working Group 67 – "VoIP in ATM" specifications); • Consulting services for system implementation and improving efficiency · Resource and traffic optimization tools.

The coming years will see changes in the telecom network environment as telecom providers will no longer support analogue lines and will eventually phase out digital lines within the next ten years. This is why Frequentis chose its IP/TDM hybrid concept as the best way to provide future-proof systems and optimal support to its customers during this period of transition. Frequentis fully supports the efforts of EUROCAE Working Group 67 – "VoIP in ATM", and uses its specifications and recommendations as the basis for all IP migration activities. All these measures guarantee that Frequentis

will continue to be a reliable partner for mastering the upcoming challenges in the area of Air Traffic Management. #855.ATC15

CANSO has welcomed Luxembourg ANA as its 101st Member. As well as managing and operating Luxembourg Airport, the Airport Authority also ensures the smooth flow of air traffic in the airspace under Luxembourg jurisdiction, supplies aeronautical information, handles operations prior to departure, processes arrival formalities for aircraft, and deals with aeronautical telecommunications exchanges. CANSO observed that: "Luxembourg occupies a central position in Western European airspace and is an active member of the important FABEC Single European Sky FAB. It has long demonstrated its co-operative spirit by outsourcing part of its airspace responsibility to Belgocontrol and MUAC in Maastricht. Luxembourg's experience in handling complex international relationships will be invaluable to CANSO." #855.ATC16

The U.K.-based transport consultancy Helios has just received its second Queen's Award for Enterprise. A market leader in air traffic management and satellite navigation consultancy, Helios won the award for doubling its exports to an aggregate of GBP 18 million over six years and securing customers in 15 new countries. Managing Director Mike Shorthose commented: "To win such a prestigious business award twice is fantastic. Since we won our first Queen's Award in 2004, Helios has worked hard to expand into geographic markets outside Europe. We've also extended our market reach beyond our core aviation business and built a reputation in rail, maritime and radio spectrum. Today we're focussed on supporting our customers through some very tough times." -- The company continues to work at the forefront of some of aviation's most promising developments, for example the Single European Sky initiative and functional airspace blocks (FABs). It also has technical experts working on the delivery of a performance-based air traffic management system. The Queen's Award recognizes Helios' success in developing new markets and its professional approach to business development. #855.ATC17

Names

SRA International Inc has named Jack Nager as Vice President, Aviation Programmes, effective 20 April 2009. Nager will lead the company's aviation business and spearhead SRA's plan to broaden its footprint in air traffic management systems and services. Nager is an expert in the transportation/aviation market, with more than 30 years working at the FAA where he had a wide range of responsibilities including developing, modernizing and sustaining the agency's ATC system; innovating processes and technologies for ATC infrastructure; negotiating technical co-operation agreements with other nations; and overseeing ATC modernization projects in all 50 U.S. states. #855.ATC18