

AIR NAVIGATION SERVICES NEWS

Fraport AG has selected Era Systems Corp. to supply 228 of its latest-generation Squid® vehicle tracking units at Frankfurt Airport, Germany. The Squid units will support the airport's advanced surface movement guidance and control system (A-SMGCS). With more than 53.5 million passengers in 2008, Frankfurt Airport is Germany's busiest airport and ranks among the top 10 in the world. Due to the amount of ground movements, Fraport AG sought vehicle tracking units that could best provide air traffic controllers and Fraport's ramp control with complete surface situational awareness. Era's Squid units are standards-compliant ADS-B transponders that are easily mounted on top of airport vehicles. The units constantly and automatically transmit vehicle locations and identification to air traffic controllers, ensuring that a complete picture of all aircraft and vehicles is available to controllers at all times.

The latest generation Squid features a new area management function that allows users to define boundaries in and around an airport where the units will automatically turn on and off transmissions. This allows for busy airports to limit the amount of non-essential surface transmissions. "Fraport AG is renowned for its excellent safety and innovative leading-edge technology. Working together, we will help them to join several airports worldwide, realizing the benefit that our vehicle tracking units provide," said Era Vice President, Bernard Asare. #872.ATC1

On 18 December 2009, the Estonian Air Navigation Service (EANS) and Comsoft signed acceptance certificates for their new eAIP solution, featuring Comsoft's AIXM 5.1 database CADAS-AIMDB and Synclude's eAIP production system GroupVerve AIS. After the implementation in Tallinn in spring 2010, EANS will operate the first fully-featured AIXM 5.1 installation worldwide. This modern approach implements an EAD system interface (ESI), allowing a direct connection to the European AIS Database (EAD). The new system will serve as master database for all national aeronautical data including Obstacles (eTOD). Static AIXM 5.1 data will be uploaded to EAD after its conversion as well as eAIS packages created by GroupVerve. #872.ATC2

* Taiwan's Air Navigation and Weather Services (ANWS) has signed a contract with Comsoft for the provision of a comprehensive ADS-B network. Now, half a dozen redundant Quadrant ADS-B ground stations and eight complementary QCMS systems for monitoring and control of all sites in Taiwan have been taken into operational service. Due to Taiwan's particular geographical characteristics, ANWS decided on implementing ADS-B as additional surveillance method. The principle aim was enhancing the overall quality of air traffic services in the Taipei flight information region (FIR). ADS-B equipped aircraft automatically broadcast their identity, position, altitude, speed, and other parameters at half-second intervals, and the result is a functionality similar to SSR but with higher accuracy. #872.ATC3

* In November 2009, Peru's CORPAC SA and UAEAC in Colombia successfully performed AMHS interoperability tests with concluding pre-operational tests in strict adherence to ICAO testing guidelines. Now, both air navigation service providers (ANSP) are officially ready to introduce the new communication standard in South America for the exchange of flight plans and other aeronautical messages. The ANSPs are using Comsoft's AIDA-NG AMHS. With Peru's pivotal role between the SAM and

NAM ICAO regions, this first international link is set to evolve as the nucleus of the South American AMHS. #872.ATC4

Airservices Australia and Thales have delivered major performance and safety enhancements to Australia's Air Traffic Management (ATM) system, as part of a programme to continuously improve the reliable, efficient and safe management of the country's airspace. The enhancements are part of an ongoing evolution strategy designed to take advantage of new technologies and industry standards. The latest improvements, known as TAAATS V12, were subjected to unparalleled levels of testing to ensure the highest standards of reliability and safety for Australian travellers. A large multinational team of Thales engineers developed and modified more than 1.3 million lines of code, implementing a total of 51 enhancements into an existing operational environment. The rollout was completed in early December 2009, following a staged commissioning process to multiple sites across Australia.

Chris Jenkins, Managing Director of Thales Australia, said the enhancements delivered significant benefits to Airservices Australia and the Australian public. "We have worked very closely with Airservices Australia to successfully deliver this complex and challenging upgrade. Our extensive ATM expertise in Australia, combined with our international experience delivering air traffic management systems to over 50 countries, enables us to meet a wide variety of customer requirements, as well as the complex technological challenges involved in operational upgrades." Greg Russell, Chief Executive Officer of Airservices Australia, said the latest upgrade enabled the organization to remain at the forefront of ATM capability. -- Airservices Australia and Thales have made several upgrades to Australia's ATM system since The Australian Advanced Air Traffic System (TAAATS) was commissioned in March 2000. Airservices annually manages 4 million domestic and international flights that carry 63 million passengers, and covers 11% of the world's surface. #872.ATC5

Swiss air navigation service provider (ANSP) Skyguide has reorganized the airspace controlled from Geneva. The transition took place during the night from 16 to 17 December 2009. Air traffic was kept flowing during and following the transition at reduced capacity. The new organization will allow Skyguide to react more effectively to increasing demand in the future. "With the new sectorization of the upper airspace, we can provide around 10% more capacity than at present," said Peter Sommer, head of air navigation services in Geneva. The additional capacity will contribute to the management of the growth in traffic forecast for the future without any loss of punctuality.

The control centre in Geneva is responsible for supervising the airspace in the western part of Switzerland. The upper airspace, which extends from 24 500 ft to 66 000 ft above sea level, is divided into several vertical layers. These airspace units are called sectors. Two air traffic controllers work in each sector. Sector opening times are adjusted in accordance with traffic density. #872.ATC6

For many years, Austria's Frequentis AG has been a driving force behind the standardization of voice services on IP-based transport infrastructures in civilian air traffic control. DSN in France and Germany's DFS, together with Frequentis and radio manufacturers, stepped forward to assess the operational feasibility of the outcome of EUROCAE Working Group 67. A test platform was installed and configured between the two Air Navigation Service Providers sites in Toulouse (France) and Langen

(Germany). Joint field trials demonstrating IP based ATC radio and telephone communications as well as legacy system integration were successfully completed in late 2009.

With a strong presence of Frequentis, the trials confirmed the readiness of VoIP (as defined in EUROCAE WG67 specifications) for deployment in an operational environment. Gateway tests illustrated that existing legacy systems can be integrated within an IP network infrastructure. The test phase of the field trials involved more than 230 VoIP Air Traffic Services related tests, each performed by DSN and DFS within a simulated operational environment. Frequentis was a core member of the project team.

#872.ATC7

Spanish information technology company Indra is working on refurbishing the terminal and on the navigation systems of Lubango Airport in Angola under a EUR 7 million contract. The objective is to prepare the aerodrome to welcome thousands of visitors in 2010 who will attend the African Cup of the Nations. The equipment to be deployed will include access control, check-in, boarding and luggage management, as well as air navigation systems. Indra will renovate the communications equipment of the control tower in addition to the meteorological data equipment. The company will also install the boundary lights and the radio navigation systems (ILS and DVOR).

Indra's technology brings a significant advance to Lubango airport, since the aircrafts will no longer comply with visual flight rules but with instrument flight in category I instead. This means, the aircraft will be provided with relevant information through several systems when approaching the runway.

#872.ATC8

On 17 December 2009, Moscow Domodedovo Airport began operating simultaneous parallel departures from two independent runways. The procedure is in accordance to ICAO Standards and Recommended Practices (SARPs). The newly reconstructed Runway 1 and the high-technology infrastructure of Domodedovo aerodrome made it possible. Domodedovo now is the only airdrome in the Moscow Traffic Management Area able to operate independently two parallel runways which are spaced 2 km apart. Simultaneous parallel departures from two runways will ensure future increased capacity of the airdrome up to 90 movements per hour and enhance punctuality of flights as well. #872.ATC9

ARINC Inc. and Vizada Americas have announced the availability of Inmarsat Classic Aeronautical voice and data services, using the next-generation Inmarsat I-4 satellite constellation. The companies will provide Inmarsat Aero H, Aero H+, Aero I, and Aero L packet data services, and Aero H+ voice services, over Inmarsat's I-4 satellite network, as well as over the previous generation Inmarsat I-3 satellites. Services available over the new I-4 network will complement those available on the I-3 network. Inmarsat's Classic Aero services are currently used on more than 8000 commercial air transport aircraft, business jets, and military aircraft for operational and safety-critical applications, such as ACARS and Controller-Pilot Data Link Communications (CPDLC). "ARINC and Vizada continue to anticipate and respond to our customers' needs by integrating this new satellite network with the world's most diverse aviation media suite, including GlobalLink VHF, HF DL and Iridium. This diversity results in a robust system that should never leave our customers out of touch," stated Ron Hawkins, ARINC Vice President, Commercial Aviation Solutions. -- The two companies began joint development efforts in 2008, with ARINC leading the data link engineering efforts and Vizada integrating the voice

system capability. They have since established internetworking connections to the new Inmarsat Satellite Access Stations (SASs) located in Hawaii, USA, and Fucino, Italy. #872.ATC10

In November 2009 one of SESAR's most ambitious topics started with the first technical meetings on the iCWP - the integrated controller working positions of the future, with active support of most member organizations, hosted by Frequentis in its Vienna headquarters. Theodor Zeh, Human Factors Director of Frequentis, said: "I am very relieved that the first technical meetings for the iCWPs were so successful. An optimal symbiosis between men and machines is a basic requirement to achieve the ambitious goals of the SESAR Masterplan." Between 2009 and 2016, about EUR 2 billion will be invested in 16 work packages and some 250 SESAR projects. In addition to the iCWP project, Frequentis is involved with the overall design of the ATM architecture, and other projects addressing safety and security.

For the future management of air traffic, all data needs to be presented in a harmonized way. With its expertise in human factors and usability, Frequentis leads the design of future iCWPs. The iCWP projects will generate human factors and user interface design documents for all needed working positions.
#872.ATC11

Air traffic control and radio communications technology from Harris Corporation will provide critical air-to-ground and ground-to-ground digital communications services for a new Manila Area Control Centre in the Philippines, connecting it with remote sites throughout the 7000-island nation. The Harris Liberty-STAR™ Voice Communication and Control System (VCCS) will improve communications between the Area Control Centre controllers and aircraft en route and on the ground. Also, the Harris Integrated Radio Equipment and Network Adapter (IRENA), which can emulate virtually any radio link, will enable communications to isolated areas - where digital services are sparse and reliance on legacy links and older analog technology is required. John O'Sullivan, Vice President of Mission Critical Networks for Harris Corporation, said: "Operators can continue to communicate using their legacy radio equipment and upgrade when they choose to do so." The contract marks the first international sale of the IRENA system. #872.ATC12

Chantilly, VA-based TASC Inc. is part of a team that has been awarded the Aviation Weather Office contract by the U.S. FAA, improving detection, forecasting, integration, and dissemination of weather information to reduce the impact of weather on NextGen operations. TASC is a subcontractor to Basic Commerce and Industry Inc. (BCI) on this award. The company's portion of the contract has a total potential value of USD 5 million over a five-year period. Under the contract, TASC will provide technical and acquisition services to support programme management, systems engineering, performance management, and implementation of the Air Traffic Organization (ATO)-Planning weather programmes. "We have a well-established working relationship with the FAA and have been successfully providing it support over 20 years," said Pamela Drew, Vice President of Enterprise Systems for TASC Inc.

The FAA Weather Office contractor support team, lead by BCI, consists of TASC Inc., ITT Industries, Inc., Data Transformation Corporation (DTC), and Engility. Work on the contract will take place primarily in Washington, D.C. and the William J. Hughes Technical Center in Atlantic City, N.J. #872.ATC13

A SkyLine automated air traffic management (ATM) system supplied by Lockheed Martin has gone into full operation at the Aktoobe Area Control Centre (ACC) and three remote control towers in Kazakhstan. The system, installed under contract with Kazaeronavigatsia, the air navigation authority for Kazakhstan, is part of a major modernization programme using advanced technologies to achieve the highest standards of quality, safety and security in air traffic management for the region. A comprehensive commercial, off-the-shelf automation system, SkyLine ATM includes flight data processing and surveillance data processing capabilities that can function as a tower, terminal area, procedural or flow monitoring system service. It provides a flexible configuration of features and functions to fit user requirements. At Aktoobe, the system provides en-route and approach control at the Aktoobe ACC, as well as tower control at Aktoobe and the airfields at Uralsk, Atyrau, and Aktau. The contract also includes a Lockheed Martin Omnyx air sovereignty system at the Astana area control centre that provides air surveillance across the country. #872.ATC14

Two of the four key sites designated for Automatic Dependent Surveillance-Broadcast (ADS-B) 'critical services' have achieved Initial Operational Capability (IOC). Critical services IOC was declared at FAA's Louisville, KY, Terminal Radar Approach Control (Tracon) facility on 19 November 2009, and at the Houston Air Route Traffic Control Centre on 17 December 2009, according to Vincent Capezzuto, FAA Director of Surveillance and Broadcast Services and ADS-B programme manager. The Houston centre provides air traffic control over the Gulf of Mexico. IOC for ADS-B critical services there supports 5-nm separation in non-radar airspace, benefiting petroleum industry support helicopters in particular. Some ADS-B ground stations are located on offshore oil platforms. "We've segregated the airspace," Capezzuto said. "If you can file IFR, you go up to 5000 ft and you go direct to the (offshore) platform." Achieving critical services at the two remaining key sites - the Philadelphia Tracon and Anchorage centre, covering Juneau, AK - will drive release of FAA's ADS-B rulemaking, scheduled for release in April 2010. The rule will establish performance requirements for avionics needed to operate in an ADS-B environment. #872.ATC15

Farmingdale, NY-based Telephonics Corporation has opened a new office in Hong Kong to expand its presence in China and address the increasing Air Traffic Management (ATM) requirements in the region. Telephonics has been active in the Asian aviation market since 1985 when it was awarded its first contract for an air traffic control system at Guangzhou International Airport. In 1995, Telephonics began installation of its first AeroTrac® ATM system in China. Since that time, Telephonics has installed more than 20 additional AeroTrac systems throughout the Southeast region of China. Donald Pastor, President of the Electronic Systems Division of Telephonics, said: "We believe that opening an office in Hong Kong is the key to enhancing our presence in Asia. This new facility will allow Telephonics to address the Hong Kong International Airport requirements and better serve other customers throughout China's Southeast region." #872.ATC16

EIZO Technologies has joined the CANSO as a Silver Associate Member. EIZO Technologies, based in Hakusan, Japan, specializes in the development, design, manufacturing and sale of display monitors and peripherals, and imaging system software. CANSO Director General, Graham Lake, said: "I



12 January 2010
No. 872
ATC

am very pleased to welcome EIZO Technologies as our 51st Associate member. The Associate members are very important to CANSO as we look to bring the industry together on our journey towards a seamless ANS, and I am sure that EIZO will find its membership of CANSO a valuable business tool."
#872.ATC17