

## **AIRPORT INFORMATION TECHNOLOGY**

### **Airport & Ground Operations**

**Engineering company J&P (Joannou & Paraskevaides Group) has chosen SITA to provide its complete suite of airport IT solutions to the new USD 750 million terminal at Queen Alia International Airport (QAIA) in Amman, Jordan, which will open in early 2012.** QAIA joins the list of international airports that are equipped with the entire SITA portfolio. SITA's systems integration will provide a total airport IT solution operating 70 check-in counters, 18 departure gates, 16 transfer desks, 10 check-in kiosks and 133 flight display screens across its 90 000 m<sup>2</sup>. A further expansion phase is planned which will bring total capacity to 12 million passengers. J&P management said: "This is a very strategic project for our company and we chose SITA as our partner because of its long history supporting air transport in Jordan and the depth and sophistication of its portfolio of IT solutions. We aim to deliver a world-class airport."

Key SITA IT solutions which will be implemented in time for testing in October 2011 include the AirportConnect Open check-in platform and Common-Use Self Service kiosks; Airport Operational Database; Resource Management Systems; Flight Information Display System; Baggage Reconciliation System; Billing System and Passenger Handler. Hani El Assaad, SITA Regional Vice President Middle East and North Africa, said: "SITA is very pleased to be involved from the outset in this showcase project. When the new airport opens in two years it will be a major hub for the region. Our solutions will span all terminal-side operations." #885.AIT1

**Abu Dhabi Airport Services (ADAS) has commenced live running with Mikrofax's ePurchasing Mikrofax eBuyerAssist web based eProcurement platform.** The system is being used to coordinate the purchase of spares and parts for the airports operations and is part of the Abu Dhabi Airport's recent expansion plans. All procurement activities have been activated within the system from initial electronic request entry, issuance of Request for Quotations (RFQ) to allow for competitive bidding, purchase order generation, goods receiving and tracking. Together with a tight electronic approval chain, this allows the various departments within the airport to coordinate their buying through a central channel and, most importantly, also now demonstrates transparency in the procurement function that simply did not exist before the system rolled out.

Mikrofax's Michael Petter said: "Prior to the implementation of the system, the purchasing activity for each department at the airport was operating with bits of paper moving around and getting lost, meaning delays and frustration. Implementation of our web based purchasing software solution has now resolved all those issues. The system has been running successfully for many months and we have received happy and positive feedback from the systems users. I'm delighted to report we have another happy client in the Middle East region, which, this year is quickly becoming an important area of expansion for us."

Mikrofax provided on-site training, implementation, configuration and setup guidance on the ground in Abu Dhabi. Mikrofax are also hosting the entire solution at their secure data centre and are providing around the clock 24/7 technical support and services. #885.AIT2

**Nashville International Airport, TN, has contracted for the Passur landing fee management solution to ensure that the airport captures all its landing fee revenue.** The Passur landing fee management program is designed to enable airlines to standardize and automate the landing fee process across various airports to ensure accuracy, transparency and cost efficiencies.

Working in concert with airlines at more than 30 airports, the system is meant to ensure that airlines are not subsidizing airfield operations beyond their actual use, resulting in annual savings. Jim Barry, CEO of Passur Aerospace, said: "This is an essential move if airports are to partner effectively with their carriers to ensure transparency and cost containment." Connecticut-based Passur Aerospace is a business intelligence company that provides its customers predictive analytics built on proprietary algorithms and on the concurrent integration and simultaneous mining of multiple databases. #885.AIT3

**OAG and SITA have announced their continued alliance to bring the industry the best and most advanced aviation information.** This renewed agreement elevates the two companies' relationship from that of data provider and user, to a partnership committed to providing the aviation industry with continually new and enhanced information services. As industry leaders in each of their markets, OAG and SITA will combine their information assets to improve information services available to the aviation industry. "With OAG, SITA will provide the more than 130 airlines using SITA's Horizon passenger solutions with the most-up-to-date airline information. We will ensure the highest levels of data accuracy supporting improved customer service," said Brian Cook, SITA Vice President, Passenger and Airline Solutions. #885.AIT4

## **Air Traffic Management & Flight Operations**

**CSC has successfully implemented the hardware platform technology upgrade at 82 FAA remote sites around the U.S.** This hardware upgrade is part of a larger FAA effort to modernize traffic flow management. The FAA awarded CSC a contract in 2004 to modernize its traffic management system, which tracks, anticipates and manages the flow of air traffic throughout U.S. airspace. The system enables the FAA to predict demand, identify constraints, mitigate delays and maintain common situational awareness. "CSC is proud of this successful technical upgrade and pleased to continue our support of the FAA and its mission to provide the safest, most efficient aerospace system in the world," said Mike Gaffney, president of CSC's North American Public Sector Civil and Health Services group. The 2004 agreement had an estimated total value of USD 589 million. #885.AIT5

**Systems Research and Applications Corp. (SRA) has been awarded a single-award indefinite delivery, indefinite quantity contract from the U.S. FAA to continue supporting the airport technology R&D support programme at the FAA William J. Hughes Technical Centre (FAATC) in Atlantic City, NJ.** The contract has an estimated total value of about USD 57 million over five years. The FAATC operates a state-of-the-art, full-scale, airport pavement test facility that provides high-quality test data from rigid and flexible pavement subjected to simulated aircraft traffic. Under this contract, SRA will provide the FAA with research and development services in the areas of airport pavement design and testing; aircraft rescue and fire fighting; wildlife hazards; bird strike mitigation; and runway surface technology. The contract will also allow SRA to provide additional services to the FAA in the areas of

airport capacity analysis and planning, enhanced visual guidance and lighting technologies and advanced materials testing. #885.AIT6

**ITT expects to profit from being the first to market real-time flight and runway traffic data to aircraft manufacturers, airlines and other companies in the U.S.** The new initiative envisions collecting detailed data from next-generation ground- and satellite-based navigation systems about aircraft routes, traffic-control bottlenecks, airport surface movements and updated weather information. A new ITT business unit initially plans to market the raw data, and later analyze and tailor it to suit individual customers. Boeing Co. is expected to be the first company to get data from the nascent business, according to industry officials.

By painting a precise picture of activity on airways and airports in the U.S., ITT's service could help airlines devise more fuel-efficient and environmentally friendly routes and landing approaches, or avoid airborne turbulence.

ITT's move reflects the aviation industry's broader reliance on satellite-based navigation and safety systems. Under an arrangement that ITT previously worked out with the FAA, some of the anticipated revenue also could help defray the cost of implementing next-generation air-traffic control improvements. Through 2025, ITT expects to be paid nearly USD 1.9 billion by the FAA to install, operate and maintain the ground portion of the FAA's NextGen air-traffic control system. John Kefalotis, the ITT official in charge of the initiative, said that air-traffic control organizations around the world are "beginning to realize that the data they have in their systems have value" in the commercial marketplace. #885.AIT7

**Inaccuracies or errors in monitoring emissions data could lead to aircraft operators entering the EU Emissions Trading Scheme (EU ETS) paying more than they should for emissions and getting less than their entitlement in carbon credits, says ETS Aviation,** a specialist in monitoring, reporting and verification (MRV) software and support services. Even a small airline with a fleet of six aircraft emitting 150 000 tonnes of CO<sub>2</sub> a year could lose up to EUR 1 million over the 2012 to 2020 reporting cycle for a 1% to 2% error in monitoring emissions data, calculates the company. Meanwhile, leading accredited EU ETS verifier CICS is warning that many operators still have much work to do to meet deadlines and has released a white paper to provide a resource on verification issues.

Julien Dufour of Paris-based verifier VerifAvia, said wrong or incomplete data will lead to the data not being verified and the operator will not be able to submit a signed-off report to the Competent Authority. However, he believes only the UK has a penalty regime in place at present, with the Aviation EU ETS Directive still in the process of legal transposition in a number of States, including France. Rather than developing their own expensive in-house MRV system, ETS Aviation is naturally recommending its Aviation Footprinter software to operators of all sizes, and claims leading verification bodies in the U.K. are looking at the viability of remote verifications using the product.

ETS Aviation has signed two agreements in recent weeks which will link Aviation Footprinter to both Aerobytes' Flight Data Monitoring system and the Flight Operation System (FOS) developed by Computer Technologies for Aviation (CTA), which will aid customers of the two systems in emissions data recording. Aerobytes Managing Director Eddie Forester said the process of collecting the information and converting it into the required format was an unrealistic burden to place upon individual airlines.

To help get to grips with the legislation, leading U.K.-accredited verifier Complete Integrated Certification Services (CICS) has produced a white paper entitled 'Emissions Verification in the Aviation Sector'. The document examines the requirements put into place under the EU ETS and looks at methods of best practice for both airlines and verifiers in ensuring they are met. -- CICS was the first body to be accredited under the second phase of the EU ETS (2008 to 2012), and verifies over 40% of the operators reporting into the UK and Irish Environmental Agencies. Previous work in the aviation sector has included independently verifying carbon emissions for several major international airlines to support their offset programmes and EU ETS pre-verification. #885.AIT8

## **MRO & Engineering**

**Canadian aviation services corporation Avmax Group Inc. recently selected Component Control's Quantum Control aviation enterprise resource planning (ERP) software as its business software platform for its Calgary, AB headquarters as well as sites in the United States and Canada.** "Avmax Group provides diverse services such as management of spares inventories, avionics repair, aircraft leasing and operations, and heavy maintenance at multiple locations," said Avmax senior controller Guy Bonnier. "Having Quantum manage all our locations sets the stage for all Avmax operations to collaborate and be competitive." Quantum Control is an aviation-specific ERP platform combining shop floor control, inventory management, accounting, e-commerce, sales and invoicing, and other business functions into one integrated software suite. #885.AIT9

**Component Control has announced that Sargent Aerospace & Defense, a leading supplier of engineered components and aftermarket services, has selected Component Control's Quantum Control aviation enterprise resource planning (ERP) software as the ERP platform for its Aftermarket Services business unit.** Sargent turned to Component Control to streamline operations at its 150 000-ft<sup>2</sup> facility in Miami, FL, which includes seven different MRO shops. According to Sargent's Quantum programme manager, Kenneth Nevill, the ability to integrate the company's various MRO shops onto one aviation-based ERP platform will provide a competitive edge.

"We complete more than 26 000 repairs annually and track over 20 000 line items of inventory," said Nevill. "Quantum will provide clear visibility of parts used and repairs completed on any given component in any of our MRO shops, streamlining our operations and allowing quicker turnaround time on repairs."

Quantum Control combines manufacturing, shop floor control, inventory management, accounting, e-commerce, sales and invoicing, and other business functions into one integrated software suite. Component Control recently completed implementation of its Quantum Control aviation enterprise resource planning (ERP) software at International Governor Services (IGS), a BBA Aviation Group company. The successful Quantum implementation, which went live on 14 June 2010, marks the second BBA Aviation Group company to select and implement Quantum Control. #885.AIT10

**Engineering services provider QuEST (Quality Engineering and Software Technologies) Global Engineering has signed a five-year extended agreement to support the engineering resources of Rolls-Royce across its business divisions until 2015.** The new contract follows an increase in the scope and size of work QuEST has been providing since 2005 when it first signed a five-year agreement

with Rolls-Royce in India. "This agreement with Rolls-Royce is significant. We see it as an endorsement of our engineering capabilities in the aerospace, marine and energy sectors and the relationship we share with Rolls-Royce," says Ajit Prabhu, QuEST CEO. Unlike information technology, which benefits from younger workers, engineering calls for a more experienced workforce, says Prabhu. QuEST is a niche player in engineering services with capabilities in design, development, manufacturing, engineering, tooling and aftermarket support in repair engineering, offering integrated processes to customers such as Rolls-Royce, for whom it has put aside 500 engineers. -- As Rolls-Royce plans to expand its assembly business in Singapore for the Trent 1000 through a USD 700 million investment, QuEST expects to support it with 100 employees in its new Singapore international headquarters. QuEST in the past has supported work streams across the lifecycle of Rolls-Royce products, including products for the next-generation Airbus A350XWB family of aircraft. #885.AIT11

## Security

**A massive software failure has hit India's Bureau of Civil Aviation Security (BCAS), severely affecting the publication of new smart card airport security entry passes for those working inside airports across the country.** The BCAS is likely to miss the deadline for publication of thousands of the new smart card passes which was to be by the end of July 2010. The delay could have a bearing on aviation security since the new smart card passes are expected to completely eliminate any chance of impersonation or tampering with airport passes. The current airport security passes do not have smart cards. "The smart card passes have electronic chips inside with details of the individual that makes it impossible for any impersonation to take place. This will be a crucial measure to make Indian aviation security foolproof," said a source. Permanent airport security entry passes in India are issued by the BCAS - the agency responsible for aviation security in India - that functions under the control of the civil aviation ministry. #885.AIT12

## Company News

**SRA International Inc., a provider of technology and strategic consulting services and solutions, has acquired Sentech, an energy management consulting company with expertise in renewable energy, distributed generation, energy efficiency and advanced transportation technologies.** Completion of the transaction is effective immediately. Financial terms of the acquisition were not disclosed. Sentech is expected to contribute approximately USD 30 million of revenue for fiscal year 2011. "Bringing Sentech's strong domain expertise together with SRA's IT systems and environmental offerings will be a complementary fit as we continue to enhance our strong presence in the environmental and energy markets," said SRA CEO Stan Sloane.

With this acquisition, SRA expands its expertise in delivering a comprehensive set of services in sustainable buildings and energy efficiency; clean energy supply; advanced transportation; electricity and distributed energy; and business management and consulting. Sentech complements the climate change-related services of SRA's recent acquisition of Perrin Quarles Associates (PQA), now part of SRA's Environmental and Energy Services business unit. #885.AIT13

## **Awards**

**Thales Australia has won a prestigious 2010 Consensus Software Award for its Java Human Machine Interface (JHMI) Engine – the building block of the company’s innovative air traffic management solutions.**

The JHMI Engine, which is part of the company’s Eurocat air traffic management system, was evaluated by a panel of respected software industry practitioners. Their citation read: “The human challenge of managing the ever increasing complexity of aircraft movements on a global scale has been impeccably and elegantly addressed by Thales’ new JHMI. The system has been internationally recognised for its innovation, performance and market potential... JHMI proves Australian leadership in mission critical technological development”.

The high performance, flexible and configurable JHMI Engine provides a complete framework for air situation display applications. Its layered component-based architecture allows for deployment in entire system replacements or as an upgrade to existing systems. The software incorporates OpenGL for high performance graphics that provide advanced capabilities for the presentation of information to air traffic controllers. The design of the system is highly reliable, scalable, and adaptable to a broad range of system sizes and complexities. The JHMI Engine is the basis for three current products: the award-winning Air Traffic Flow Management (ATFM) system; the pilot module in the Eurocat simulator; and the tactical display component in Thales’s next generation air traffic management automation system.

#885.AIT14