



Sim show

The Interservice/Industry Training, Simulation and Education Conference (I/ITSEC) was held between 6 and 9 December 2004 in Orlando, Florida. As well as a full conference session on the latest simulation and training issues, the event also featured a comprehensive trade exhibition featuring representatives from both government and industry. **BILL READ** reports.

One of the talking points of the show was the demonstration of a large scale real time combat simulation. Known as the joint virtual training special event (JVTSE), the simulation allowed onlookers to observe a virtual simulation from the cockpit of an F-22, F-16, A-10, UH-60 troop transport and an AH-64 Apache helicopter and experience a combination of live air track information, virtual aircraft and enemies and real soldiers all interacting in the same mock battlespace environment. A total of 28 stands on the show floor were linked over a fibre optic network together with 100 different computer systems including offsite links to the Air Force Research Lab in Meza, AZ, and the Southern California Offshore Range Environment.

Christie Digital showed a range of simulation digital projectors together with its Christie Imager+ edge-blending and warping processor for manipulating images across any size screen and shaped surface, including cylindrical or spherical screens. The company unveiled three new projectors at the show: the Christie Matrix 2000, 3000 and

4000. Christie's projectors are used in a number of simulation applications including air traffic control and military and civil aircraft training.

The US Defense Advanced Research Projects Agency (DARPA) used the show to debut its new DARWARS military training superiority R&D programme. Designed to revolutionise on-line experience-based training, the DARWARS exhibit featured ten training technology specialists from academic and industry sectors.

Training software specialist AcuSoft exhibited a wide range of products, including scenario development, 3D visualisation, after action review technologies, environment database conversions and correlation, electronic classroom management systems and map generation. Demonstrations were given during the show of ground, air and sea military scenario manoeuvres and exercises.

Several major international contracts were announced by radio navigation and landing aid specialists AMS-ASI. These included three

Category II instrument landing systems (ILS) and two VHF omni-directional range/tactical air navigation systems for two Royal Air Force of Oman air bases. Other contracts included nine marker beacons and four complete ILS/distance measuring equipment for Polish Air Force bases.

Advanced Interactive Systems (AIS) provides a wide range of interactive security training systems, including a recent contract to retrain 26,000 new airport baggage screening employees for the US Transport Safety Administration (TSA).

On the opening day of the show transport communications specialists ARINC announced a contract to supply Singapore low-cost



L-3 Communications' Link Simulation and Training division announced a \$12.7m contract to provide an F-16 aircrew training system for the Royal Air Force of Oman. The deal includes the delivery of a full mission trainer, instructor operator system, computational systems and a visual systems database. The division also used the show as a debut for a new advanced helmet-mounted display (AHMD) system. Meanwhile the company's Security and Detection Systems division unveiled a new eXaminer 3DX(R) 6500 explosives detection system for aviation bag screening.

carrier Jetstar Asia with its AviNet Type B business messaging system. The system will be used to transmit passenger information to destination airports.

A new integrated maintenance training system (IMTS) was

Developer and manufacturer of interactive open-architecture computer visual systems, Quantum3D announced the launch of a new synthetic environment image database. Named CONUS, the new database offers high resolution images of airports, airfields and other locations for use in precision flight and weapon system training and mission rehearsals.



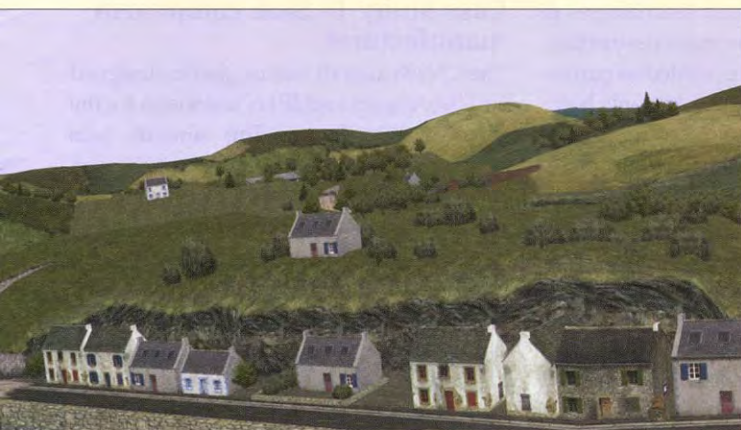
Simulation of Nellis Air Force Base



A contract was signed at the show between Saab and Barco for the provision of four SEER 8 minidome Gripen fighter simulators to the Swedish, Hungarian and Czech Republic Air Forces. Barco also used the show to showcase its iCommand network-centric visualisation system which it is marketing for security and defence applications.

Silicon Graphics (SGI) announced the sale of six SGI Onyx high-performance image generators to Link Simulation and Training. The new computers will be used to power an interactive full mission flight simulation training system for the Canadian Air Force's CF-18 advanced distributed combat training system (ADCTS) programme.

demonstrated by military and civil training systems provider Atlantis Systems International. Consisting of two touch screen displays showing cockpit instrumentation and an instructor workstation, the IMTS provides realistic, hands-on training in the operation,



A new product at the I/ITSEC show from Thales was the ThalesView multipatform visual system (illustrated above) that can be used for land armament, helicopter, military aircraft and synthetic environment applications. Thales also had a synthetic environment system designed to aid procurement decisions as well as its latest cockpit systems trainer which can be reconfigured for different aircraft types including transport and refuelling aircraft. Visitors to Thales' stand were also able to examine the 'battlelab' simulation system which modelled preparation, engagement and analysis of co-operative engagements in joint operations.

fault location, repair and maintenance through the simulation of aircraft subsystems and their interrelationships.

A range of commercial off-the-shelf (COTS) graphics options were on display from Matrox Graphics for use in such applications as



CAE Flight Training announced a new order for three full-flight simulators (FFS) from Emirates-CAE Flight Training (ECFT) whose existing facility is shown above. These include a new Boeing 777 and Airbus A320 FFS which are to be installed by spring 2006. The third simulator, an Airbus A330/A340, will be relocated from CAE's global network. Orders were also announced from the Zhuhai Flight Training Centre in China for an Airbus A320 FFS together with a Boeing 737NG Simfinity integrated procedure trainer (IPT) as well as a Learjet 45 FFS and an IPT for the Maroochydore, Australia branch of the Singapore Flying College.

simulation training, satellite imagery analysis and air traffic control.

Boeing Training and Support Services announced that the F-15C mission training center at Kadena AFB in Okinawa would open in April 2005.

A reconfigurable flight simulator that can be quickly changed from one aircraft configuration to

another was on offer from Symvionics. The DeltaSym system can simulate all US single-seat fighters as well as some overseas fighters and trainers.

Olé Online Learning Environment announced that its latest on-line learning management system upgrade has been implemented for CF-18 upgrade training by the Canadian Forces' Base in Cold Lake.

Held every year in the USA, the I/ITSEC convention aims to promote co-operation among the armed services, industry, academia and government agencies to improve training and education programmes, including military and civil aviation training. The latest exhibition hosted 359 stands from industry participants together with a further 59 stands from US government agencies. First launched in 1966 as the Naval Training Centre/Industry Conference, the event has gone through a number of name changes to its present one of I/ITSEC. Over the years the conference has evolved and expanded to include participation by the US Army, US Air Force, US Marine Corps, US Coast Guard and international industry. The next show is scheduled in Orlando from 28 November – 1 December 2005.