

SERVICE INCLUDED

The emphasis in the military flight simulation business is moving from the simple supply of equipment to include packages that come with extras such as training

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Stakes seem to be increasing in the military flight simulation business. More and more contracts involve some element of service provision, shifting the emphasis away from equipment supply. And more military customers are forging long-term relationships with preferred suppliers, narrowing the competitive playing field.

The biggest simulation-based training contract of 2003, the US Army's 20-year, \$1.1 billion Flight School XXI programme, was won by service company Computer Sciences (CSC), dealing a body blow to Canadian simulator specialist CAE's ambitions of establishing itself as a US prime contractor. Concerned that post-Iraq "buy America" sentiment played a role in the decision, CAE has made a formal protest about the award. But the outcome of the competition may signal a move toward service providers and away from equipment suppliers.

Under the Flight School XXI programme, a CSC-led team will build and operate a schoolhouse equipped with 57 simulators and provide fee-for-service training to the US Army Aviation Center at Ft Rucker, Alabama. CSC already provides training services at Ft Rucker, and has teamed with US simulator manufacturers FlightSafety, L-3, Link and NLX for Flight

School XXI. Together they will provide 20 Bell TH-67 simulators for initial rotary-wing training; 19 Bell OH-58D, Boeing AH-64 and CH-47, Boeing Sikorsky RAH-66 and Sikorsky UH-60 simulators for graduate flight training; and 18 reconfigurable devices for collective training.

CAE's consolation is a role as prime contractor for the US Army's Special Operations Forces Aviation Training and Rehearsal Systems programme. Initially, the Canadian company's US subsidiary is providing a \$31 million combat mission simulator for the McDonnell Douglas A/MH-6 Little Bird helicopters operated by the 160th Special Operations Aviation Regiment at Ft Campbell, Kentucky.

CAE USA is now negotiating to provide similar simulators for the 160th's Boeing MH-47G and Sikorsky MH-60K helicopters, together valued at \$85 million.

Service provision

Another recent contract with a strong element of service provision is the \$287 million award to Lockheed Martin for C-130J training systems and services tied to the \$4 billion multi-year procurement of 60 aircraft for the US Air Force and Marine Corps. The contract will provide additional contractor-operated trainers, instruction and support to sustain the USAF's C-130J fleet to 2010. Here, as in many military training contracts, the aircraft manufacturer is the prime. CAE, as Lockheed Martin's C-130J training partner, will manufacture and support the aircrew and maintenance training devices under a \$100 million subcontract.

Other major US contractor-operated training programmes have moved ahead this year. Under the USAF's distributed mission training (DMT) initiative, Boeing received a \$285 million contract to establish and operate four F-15E mission training centres. The aircraft manufacturer has

already set up three such training centres for the F-15C, each with four networked simulators. Under a similar fee-for-service contract, Lockheed Martin is equipping three F-16C mission training centres.

The US Navy awarded its first DMT contract, for the Boeing F/A-18C, to L-3 Communications' EER Systems division, a provider of training services, with L-3's Link Simulation & Training division supplying the training devices. Link is also providing training devices to Boeing, prime contractor for the USAF's Lockheed Martin/Boeing F/A-22 training system. The F/A-22 training base at Tyndall AFB, Florida, became operational at the end of October, and Boeing and Link are studying DMT upgrades for the devices.

The trend towards buying training services rather than simply training devices has sent a wave of consolidation through the industry. In October, L-3 agreed to buy services company Vertex Aerospace for \$650 million in cash. Vertex (the former Raytheon Aerospace) supports a range of military aircraft and in July won the \$450 million contract to take over logistic support of the US Navy's T-45 trainer fleet from aircraft manufacturer Boeing.

L-3 has also been cited as a potential buyer of Bombardier's military training services business, having just completed the acquisition of the Canadian's manufacturer's military aircraft services unit. Bombardier runs the NATO Flying Training in Canada programme, working with trainer manufacturer BAE Systems and simulator supplier CAE, and is bidding for a 20-year contract to continue providing flight training for the Canadian Forces.

Other acquisitions include the takeover of training device manufacturer ECC International by Cubic Defense Applications, a leading provider of air-combat training systems and services. But the surprise was avionics manufacturer Rockwell Collins's purchase of US simulator producer NLX. Collins says the acquisition will allow the company to expand its service offerings. NLX has won a number of contracts to manufacture or upgrade military flight simulators, several for aircraft with Collins avionics, proving there is still a niche in the market for smaller players.

Upgrades are the lifeblood of smaller simulation companies, as well as a significant source of revenue for the majors. Most business involves modernising visual systems with the latest generation of image generators (IG). NLX is upgrading the visuals on eight US Navy Lockheed P-3C simulators, using a PC-based IG developed by Diamond Visionics and panoramic display provided by UK company SEOS. Carmel Applied Technologies is upgrading US Coast Guard Sikorsky HH-60J and

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