### Table 4.27 Canadian UAV Flight Training and Simulation Market Forecast 2012-2022 ($m, AGR %)

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<tbody>
<tr>
<td>Sales $m</td>
<td>6.2</td>
<td>6.3</td>
<td>6.4</td>
<td>6.5</td>
<td>6.6</td>
<td>6.8</td>
<td>6.9</td>
<td>7.1</td>
<td>7.3</td>
<td>7.6</td>
<td>7.9</td>
<td></td>
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<tr>
<td>AGR(%)</td>
<td>2.0</td>
<td>0.0</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
<td>2.0</td>
<td>3.0</td>
<td>3.0</td>
<td>4.0</td>
<td>4.0</td>
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</tbody>
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Source: Visiongain 2012

### Table 4.28 Canadian UAV Flight Training and Simulation Market Forecast CAGR (%) 2012-2022, 2012-2017, and 2017-2022

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<tbody>
<tr>
<td>CAGR (%)</td>
<td>2.3</td>
<td>1.4</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Source: Visiongain 2012

### Figure 4.19 Canadian UAV Flight Training and Simulation Market Forecast 2012-2022 ($m)

Source: Visiongain 2012
6. Expert Opinion

6.1 Jay Kelly; Vice President, Business Development; L-3 Link Simulation and Training

L-3 are a major provider of simulation and training services to the US government for both traditional manned and unmanned platforms, having provided pilot training for over 80 years. The company is a leading provider of high fidelity simulation environments for UAV operator training for the General Atomics MQ-1 Predator and MQ-9 Reaper MALE UAVs currently in operational service with US and allied forces.

Visiongain’s questions were answered by Jay Kelly in April 2012. We thank him for his contribution.

6.1.1 L-3 Link’s Provision of UAV Flight Simulation and Training

Visiongain: Could you start by giving a brief overview of L-3’s role in the UAV simulation and training market?

Jay Kelly: L-3 Link Simulation and Training supports advanced UAV simulation and training in both military and academic sectors. In 2005, we won the US Air Force Predator Mission Aircrew Training System (PMATS) contract, providing the first high fidelity UAV simulation system ever developed or delivered for the US military. To date the USAF has ordered, and we have delivered, 26 PMATS systems that provide training for both the Predator and Reaper crews. The success of these platforms is due to our high fidelity immersive simulation for the US community. We base this success on our 80 years of experience in manned aircraft systems simulation. The PMATS system combines the actual General Atomics ground control station software and hardware, with the L-3 Link Simulation software and fully correlated visual sensor databases. Our goal is to create a fully immersive high fidelity environment based on our HD World® simulation product line. The PMATS trainer supports mission qualification, initial qualification, continuation and mission rehearsal training. Each system simulates the aircraft performance, weapons, sensors, communications, data links, emergency scenarios and a whole set of environmental effects. Just like on many of our manned platforms, we get the operational flight programme from the aircraft manufacturer and that allows our simulation to stay concurrent with what the crews are operating.

In respect to our support of academic UAS training – in 2011 we jointly opened the University Of North Dakota L-3 UAS Training Centre. They are a leading university in UAS research, training and education. Through that training centre we offer MQ-1 Predator and MQ-9 Reaper training opportunities to UND students pursuing a BSc in aeronautics, with a major in unmanned systems.
7. Leading Companies in the UAV Flight Training and Simulation Market

This chapter contains information about a representative selection of leading companies operating in the global unmanned aerial vehicles (UAV) flight training and simulation market. Given the complexity of the marketplace and space constraints inherent in any such report, the following should not be considered an exhaustive survey.

7.1 AAI Corporation

AAI Corporation is an aerospace and defence technology company offering products and services including unmanned aircraft and ground control systems, and high-fidelity training and simulation systems. AAI is an operating unit of Textron Systems, a Textron Inc company. AAI has its headquarters in Hunt Valley, Maryland, and employs more than 2,500 people. In 2011, Textron Systems announced revenues for Unmanned Aircraft Systems totalling $701m.

AAI offer simulation and training devices in support of their Shadow tactical unmanned aircraft system (TUAS), and in support of their Aerosonde small unmanned aircraft system (SUAS). These systems provide training for pilots and sensor operators. The trainers support instructor operator stations (IOS), and allow a selection of terrain databases, weather, wind, atmospheric conditions and time of day, combined with computer generated forces with realistic behaviour. The IOS allow the insertion of malfunctions and emergencies into simulated scenarios to enhance training, whilst each trainer also has access to an after-action review to assess performance.

In December 2011, AAI Logistics and Technical Services announced that they had earned the selective Sweden Armed Forces Technical School maintenance training provider certification. This makes AAI the first UAS training provider to have earned this designation. This will allow AAI to provide specialist UAS training services in support of the Swedish Shadow TAUS.

In March 2011, AAI Unmanned Aircraft Systems announced that it had secured a fee-for-service contract from BOSH Global Services Inc. The United States Air Force Academy (USAF) contract covered the supply of an Aerosonde Pty Ltd Mark 4.7 unmanned aircraft system (UAS); support personnel to launch, fly and recover the aircraft; and computer-based training and simulation software. AAI’s one-year contract has an option of an additional year.

In August 2008, AAI stated that its suite of training aids, devices, simulators and simulations (TADSS) had been selected to support training for US Army National Guard (ARNG) personnel