

Part I

Special Focus: Canada

1. Canadian Defence Procurements; An Overall Analysis
2. Canadian Defence Industry; Exports and Orientation
3. Epicos “Industrial Cooperation and Offset Projects”
4. Cost-effective, reconfigurable PC-based simulation and training platform
5. Advanced modeling and analysis of UAV thermal signatures for management and optimization of thermal signature reduction
6. Epicos - Amazon

Part II

Epicos Newsroom

1. Britain announces £1.2 billion sub deal
2. Etihad airline linked again with Indian deal
3. Boeing, Turkish Airlines Finalize Order for 15 777-300ERs
4. Lufthansa passenger numbers down in November
5. Boeing, WestJet Celebrate Airline's 100th Next-Generation 737

Canadian Defence Procurements; An Overall Analysis



The Canadian authorities spend a fair amount of funds on defence. In 2011, Canada spent \$23,082 million USA dollars on defence expenditure according to the Stockholm International Peace Research Institute (SIPRI). Additionally, the defence budget, as a percentage of the national Gross Domestic Product (GDP) increased by 1.2% of GDP that was in 2007 to 1.5% in 2010. Canada imports defence equipment from (9) different

countries, a fact that highlights a variety of countries with which Canada is cooperating in the aforementioned subject. However, if we take a closer look in the Canadian defence imports we will see that USA plays an extremely important role that “shades” the participation of the other countries in the Canadian defence procurements.

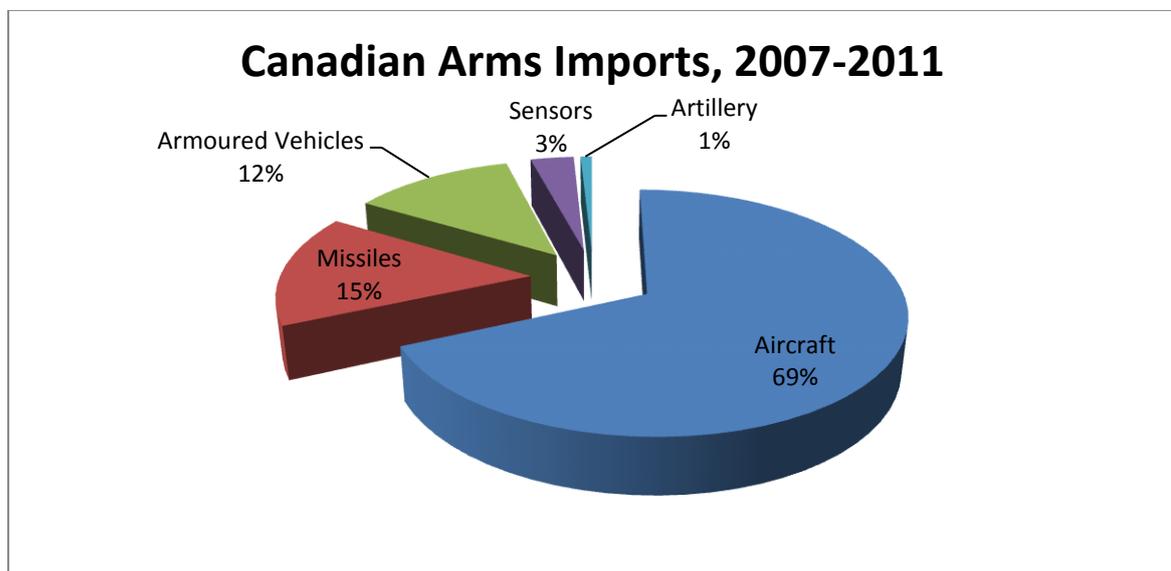
Imports (expressed in US\$ m. at constant 1990 prices)

* '0' indicates that the value of deliveries is less than US\$0.5m

	2007	2008	2009	2010	2011	Total
USA	418	368	107	215	330	1438
Netherlands		64		35		99
Germany	42	0			0	43

Source: SIPRI Publications, Arms Transfers Database

It is indicative that for the period 2007-2011, Canada spent \$1641 million US dollars at constant (1990) prices, in procuring defence equipment from foreign countries. From this amount, \$1438 million were spent in US made equipment. Netherlands and Germany are the next two countries based on the amount of funds allocated with \$99 and \$43 million US dollars at constant (1990) prices respectively.



Aircraft are the predominant area of imports for the period 2007-2011 with a total amount of \$1438 US million at constant (1990) prices. The 2nd most important sector is that of missiles with \$251 US million at constant (1990) prices whereas other areas such as armored vehicles, sensors and artillery follow.

The Canadian authorities have decided to continue making ongoing investments in several capital projects in order to either improve or replace key existing equipment and capabilities of the national armed forces. This has resulted in a significant increase in the Canadian defence budget, a trend that most probably will continue in the future.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Canadian Defence Industry; Exports & Orientation



Canada is an important player in the global aerospace and defence industry. It is indicative that in 2010 Canada according to the Stockholm International Peace Research Institute (SIPRI) was the 11th largest exporter of defence equipment. The Canadian aerospace and defence products and services are competitive in many market segments, including: regional & business aircraft; small gas turbine engines; commercial flight simulators; aero structures; landing gear systems; helicopters; armored

vehicles; space-based robotics; remote sensing systems and satellites; avionics and mission systems; and, maintenance, repair and overhaul services. The Canadian industry is a world leader in many of these segments.

Additionally, Canadian companies have a well-deserved reputation for quality, value, performance and reliability. They are recognized by customers around the world for delivering leading-edge and advanced technology solutions on time and at a competitive cost.

Additionally, Canadian industry's commitment to research and development (R&D) keeps it at the forefront of aircraft technology development and applications as aerospace sector is among the leading investors in R&D in Canada.

During the period 2007-2011 the Canadian exports reached the amount of \$1277 US m. expressed at constant (1990) prices whereas for the period 2002-2006 this amount was \$1165 US m. at constant (1990) prices.

Exports (expressed in US\$ m. at constant 1990 prices)

	2007	2008	2009	2010	2011	Total
USA	145	155	115	169	173	756
UK	138					138
Brazil	16	12	16	6	4	53
Saudi Arabia	12	10	3		26	52

Source: SIPRI Publications, Arms Transfers Database

Canadian arm exports are rather diversified in its geographical structure and range of exported items. More than (30) countries imported defence equipment from Canada, whereas, the four (4) first countries, based on the amount of funds allocated are: USA, UK, Brazil and Saudi Arabia. This actually denotes that Canada is exporting in three (3) different continents, Europe (UK) Americas (Brazil and USA) and Asia (Saudi Arabia).

The diversification of the geographical allocation of the Canadian exports is in accordance with the broad spectrum of exported items. Armored vehicles are the predominant area of exports for the period 2007-2011 with a total amount of \$579 US m. at constant (1990)

prices. The 2nd most important sector is that of engines with \$437 US m. at constant (1990) prices whereas other areas such as aircraft, sensors and artillery follow.



The Canadian defence industry is currently one of the most important worldwide. While the continued success of the industry cannot be guaranteed, the strong base upon which it is built will definitely help its future development.

Kyriazis Vasileios,
Epicos Newsletter Head Editor

Epicos “Industrial Cooperation and Offset Projects”



Epicos “Industrial Cooperation and Offset Projects” provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

[For Further Information Press Here](#)

Cost-effective, reconfigurable PC-based simulation and training platform



A publicly owned company with vast experience in providing PC-based Modeling, Simulation & Training solutions for Aerospace & Defense as well as civilian markets, is proposing to partner with another company in a targeted country. The partnership can include the provision of a cost-effective turnkey solution and a knowledge transfer of the company’s training and simulation technology platform. The proposed PC-based software platform is used across a multitude of domains, such as training, research & development, operations analysis, and entertainment. The technology enables simulation developers and training instructors to create, modify, manage and deploy any simulation-based content – aircraft, cars, ships, air traffic control tower, weapons, eLearning material, and more – while providing end users with the effective and efficient training needed to operate complex platforms.

[For Further Information Contact our ICO Department](#)

Mail at: g-menexis@epicos.com

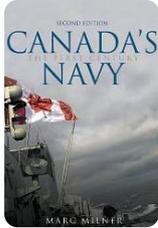
Advanced modeling and analysis of UAV thermal signatures for management and optimization of thermal signature reduction



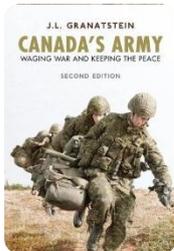
A company with extensive expertise in the space and nuclear fusion industries, specialized in thermal design, modeling and analysis, proposes to implement existing technology and know-how to analyze UAV thermal signatures and to develop solutions for managing and reducing such signatures.

[For Further Information Contact our ICO Department](#)

Mail at: g-menexis@epicos.com

**Canada's Navy, 2nd Edition: The First Century, By Marc Milner**

From its eighteen century roots in exploration and trade, to the major conflicts of the first and second World Wars, through to current roles in multinational operations with United Nations and NATO forces, Canada's navy has been an expression of Canadian nationhood and a catalyst in the complex process of national unity. In the second edition of *Canada's Navy*, Marc Milner brings his classic work up to date and looks back at one hundred years of the Navy in Canada. With supplementary photos, updated sources, a new preface and epilogue, and an additional chapter on the Navy's global reach from 1991 to 2010, this edition carries Canadian Naval history into the twenty-first century.

Canada's Army: Waging War and Keeping the Peace, Second Edition, by J.L. Granatstein

In this second edition of *Canada's Army*, J.L. Granatstein--one of the country's leading historians--brings his work up to date with fresh material on the evolving role of the military in Canadian society, along with updated sources and illustrations. *Canada's Army* traces the full three-hundred year history of the Canadian military from its origins in New France to the Conquest, the Revolutionary War and the War of 1812; from South Africa and the two World Wars to the Korean War and contemporary peacekeeping efforts, and the War in Afghanistan. Granatstein points to the inevitable continuation of armed conflict around the world and makes a compelling case for Canada to maintain properly equipped and professional armed forces.

**Britain announces £1.2 billion sub deal**

British defence giant BAE Systems will complete construction of the Royal Navy's new submarine HMS Audacious in a deal worth £1.2 billion, the Ministry of Defence (MoD) announced Monday.

The contract (equivalent to \$1.9 billion, 1.5 billion euros) for Audacious, the fourth of seven Astute Class vessels being built for the Royal Navy, will secure 3,000 jobs at the company's shipyard in Barrow, north-west England.

The hunter-killer submarines will gradually replace the Trafalgar Class currently in operation.

The first two boats in the series, Astute and Ambush, have undergone sea trials and a third boat, Artful, is nearing completion at the Barrow plant.

Preliminary work has been undertaken on Anson, the fifth craft, while construction is yet to begin on boats six and seven.

Astute suffered serious problems during its trials, encountering flooding and electronic malfunctions which forced it to resurface.

Defence Secretary Philip Hammond said: "This contract marks an important step forward in the progress of our Attack Submarine programme and moves the Royal Navy closer to adding more of these highly-advanced and powerful attack submarines to its fleet.

The minister also pledged further funding for BAE to start work on the remaining boats.

"Our ability to commit an additional £1.5 billion for boats five, six and seven underlines the benefits of a balanced budget and fully-funded equipment programme that gives our Armed Forces greater certainty.

"This funding demonstrates our commitment not only to a key Royal Navy capability, but also to the submarine industry in Barrow, which will play a vital role in Britain's defence for decades to come."

The Astute class subs are each powered by a Rolls-Royce nuclear propulsion system which boast a reactor that never needs refuelling.

They are armed with both Tomahawk land attack missiles and Spearfish torpedoes, with a range of 1,200 miles (1,920 kilometres).

Source: 2012 AFP, Agence France-Presse (AFP)

Etihad airline linked again with Indian deal

Abu Dhabi's Etihad Airways was again linked with a move into India on Tuesday, as a report claimed it was considering taking a 48-percent stake in stricken carrier Kingfisher.

The Mumbai Mirror, citing unnamed sources at the airlines, said the deal worth more than 30 billion rupees (\$553 million) would be announced about December 18, the birthday of Kingfisher's flamboyant boss Vijay Mallya.

The report, the most recent in a string about potential tie-ups between domestic and foreign carriers, came a week after Etihad was reported to be looking at Jet Airways, India's biggest carrier by market share.

Kingfisher shares climbed nearly five percent on Tuesday, trading at 15.67 rupees in the early afternoon.

Etihad chief executive James Hogan told an Indian television channel last week that it was in talks in India to add to its foreign holdings, which already include stakes in Virgin Australia, Air Berlin, Air Seychelles and Aer Lingus.

But Indian aviation analysts expressed doubt that the group would be interested in Bangalore-based Kingfisher given its debt estimated at \$2.5 billion by the Centre for Asia Pacific Aviation (CAPA), a Singapore-based consultancy.

"How does it make any financial sense? Why would you buy a company with zero sales and this kind of debt for so much money?" one aviation analyst for a major Mumbai brokerage who asked not to be named told AFP.

"Given its debt, without restructuring, it's very unlikely anybody -- a private equity investor or a foreign carrier -- would buy into Kingfisher," another Mumbai aviation analyst said.

The report came as the Mumbai Service Tax Commissioner S.K. Solanki said authorities had impounded a Kingfisher aircraft at the airport of the western city, according to the Press Trust of India.

The airline is also facing eviction from Mumbai airport for non-payment of parking and navigation charges.

A spokesman for Kingfisher, whose licence has been suspended by India's airline industry regulator until it comes up with a "viable" revival plan, declined comment on the Mirror report.

Liquor baron Mallya has been scouting for an overseas buyer to save his airline from collapse since the government in September allowed foreign airlines to purchase up to 49 percent in domestic carriers.

Staff at the airline -- named after Mallya's biggest beer brand -- ended a strike in late October over unpaid wages but Kingfisher's fleet has remained grounded after India's airline industry regulator suspended its licence.

CAPA ruled out chances in a recent report of any foreign airline buying into Kingfisher without the carrier first being recapitalised. It estimated Kingfisher would need at least \$1 billion in funding to be turned around.

All Indian airlines, except privately owned IndiGo, posted losses in the financial year ending March 31 after struggling with over-expansion, high jet fuel prices and increased airport fees.

Source: 2012 AFP, Agence France-Presse (AFP)

Boeing, Turkish Airlines Finalize Order for 15 777-300ERs

ISTANBUL, Dec. 10, 2012 /PRNewswire/ -- Boeing [NYSE: BA] and Turkish Airlines have finalized a firm order for 15 777-300ER (Extended Range) airplanes worth \$4.7 billion at list prices. The agreement, first announced in October as a commitment, also includes options for five additional 777-300ERs and is the largest order by value in Turkish Airlines' history.

Turkish Airlines' fleet currently includes 12 777-300ERs, the first of which Boeing delivered in October 2010. Over the past two years, these airplanes have formed the backbone of Turkish Airlines' long-haul operations. This latest order will enable the Turkish flag-carrier to continue to serve new destinations worldwide.

"This latest order from Turkish Airlines is testament to the key role the 777 has played in the carrier's long-haul route expansion," said Todd Nelp, vice president of European Sales, Boeing Commercial Airplanes. "In recent years, Turkish Airlines has been incredibly successful in providing its passengers with outstanding service to a growing range of international destinations. The exceptional performance of the 777-300ER, with its excellent fuel economics, reliability and passenger comfort, has been a cornerstone for Turkish Airlines' continued growth."

The 777-300ER seats up to 386 passengers in a three-class configuration and has a maximum range of 7,930 nautical miles (14,685 km).

Turkish Airlines currently operates a fleet that includes nearly 100 Boeing airplanes and serves more than 200 destinations across 90 countries worldwide.

Contact:

Daniel Mosely
European Communications
+44 (0)20-8235-5665
daniel.mosely@boeing.com

Source: Boeing

Lufthansa passenger numbers down in November

Lufthansa, Germany's number one airline, said Tuesday that its passenger numbers fell in November.

A Lufthansa statement said the airline group carried 7.691 million passengers last month, 1.3 percent fewer than in November 2011.

Lufthansa -- which also owns Austrian Airlines and SWISS -- said the number of passengers on Lufthansa-only flights fell by 2.1 percent to 5.583 million last month.

SWISS passengers were down 0.2 percent at 1.245 million, but the number of passengers flying with Austrian Airlines increased by 2.3 percent to 863,000.

And the volume of freight transported by its Lufthansa Cargo unit slid by 2.4 percent to 152,000 tonnes, weighed down by turbulence related to the global economic slowdown, it said.

Because, however, Lufthansa cut capacity last month, the key seat-load factor, which measures the number of seats filled on flights, increased by 1.4 percentage point to 75.5 percent for the group as a whole.

Taking the 11 months to November, however, passenger numbers grew 3.0 percent to 95.95 million for the Lufthansa group as a whole and the seat-load factor advanced by 1.2 percentage point to 78.9 percent.

Source: 2012 AFP, Agence France-Presse (AFP)

Boeing, WestJet Celebrate Airline's 100th Next-Generation 737

CALGARY, Dec. 7, 2012 /PRNewswire/ -- Boeing (NYSE: BA) and WestJet celebrated the 100th Next-Generation 737 to join the Calgary-based airline's fleet Friday.

WestJet began in 1996 with three Boeing 737-200s serving five cities and has grown into Canada's largest low-fare airline serving 81 destinations across Canada, the United States, Mexico, the Caribbean and Central America. With today's delivery of a Boeing 737-800, WestJet's fleet now consists of 100 airplanes -- all Boeing Next-Generation 737s.

"This Next-Generation 737-800 marks a major milestone for our airline," said Cam Kenyon, WestJet's executive vice president, Operations. "The Boeing 737 is a key component in our growth strategy. Its excellent reliability, operational efficiency and range enable us to expand our network."

The Next-Generation 737 is the most fuel-efficient and reliable single-aisle airplane today. The airplane provides added value to airlines such as WestJet by delivering reliability, simplicity and reduced operating and maintenance costs.

"The growth of WestJet over the past 16 years is truly remarkable," said Brad McMullen, vice president of North America Sales, Boeing Commercial Airplanes. "We are pleased to see the 737 play an integral role in WestJet's success. WestJet has made the Next-Generation 737 the foundation of its fleet and has established a strong operational track record with the airplane."

The 737-800 is selected by leading carriers throughout the world because it provides operators the flexibility to serve a wide range of markets. The single-aisle jetliner, which can seat 162 passengers in dual class and up to 189 passengers in a high-density configuration, can fly 175 nautical miles (320 kilometers) farther while carrying 12 more passengers than the competing model.

The airplane, a 737-800, was initially delivered to Newport Beach, Calif.-based leasing company Aviation Capital Group (ACG) and is going to be leased and operated by WestJet.

"We are delighted to be leasing this milestone airplane to WestJet," said R. Stephen Hannahs, group managing director and CEO of ACG. "The Boeing 737-800 is an excellent airplane to support WestJet's growth strategy. It provides the efficiency, reliability and passenger amenities needed to grow in today's competitive marketplace."

Contact:

Tim Bader
Boeing Commercial Airplanes
North America/Leasing Communications
425-717-0672
Tim.s.bader@boeing.com

More information: <http://www.boeing.com/newairplane//737ng/>

Photo and caption are available here: <http://boeing.mediaroom.com>

Source: Boeing