

Canada: The Growing Market for Unmanned Aerial Vehicles (UAVs) in the Defence Industry

Lucy Latka August 2008

SUMMARY

The Canadian Defence Industry has a substantial need for Unmanned Aerial Vehicles (UAVs), specifically for:

- its Armed Forces missions overseas
- the patrol of its 5,500 mile long border
- Arctic exploration

An example of a UAV currently used Canada offers the most open, accessible and transparent public sector market in Afghanistan

for U.S. goods and services outside of the United States and prides itself as having the United States as its major trading partner. Defence Minister Peter MacKay announced that Canada will spend \$95 million over two years to lease unmanned aerial surveillance vehicles from MacDonald, Dettwiler and Associates Ltd. The company says there is an option for a third year worth approximately \$35 million. Canada will send an extra 250 soldiers to Afghanistan to help operate the helicopters and UAVs. This program is a reflection of Canada's dedication to annually increasing defense spending over the next twenty years.

ADVANTAGES OF UAVS

Transport Canada has reported that UAVs are ideal for such areas as the Canadian Arctic because they can do the work that is otherwise too dangerous or dirty for humans, and can also allow for more airspace and free access to communications bandwidth. UAVs are inexpensive compared to using manned aircraft and the value of the data that can be extracted from unmanned flights in remote or dangerous areas far outweigh the investment. Manned aircraft aren't designed to fly at the low altitudes and slow speeds necessary for some types of mapping and surveying work.

DISADVANTAGES OF UAVS

There is currently a high potential for error when flying UAVs. They don't presently possess any sort of radar that can prevent potential collisions with manned vehicles which also have the potential to occur in densely populated areas. Also, because the vehicles can travel at exceptionally fast speeds, groundcomputer malfunction could lead to loss of vehicle control and perhaps a dangerously low flying aircraft.

MARKET DEMAND

Included in its 2006 Budget, the Government of Canada (GOC) aimed to provide \$5.3 billion over five years and \$1.8 billion annually starting in 2011-2012 towards defense funding. Once again reiterated in Budget 2008, the Canada First Defence Strategy establishes predictable long-term funding, based on an automatic annual increase in defense spending from the current 1.5 percent to 2 percent, beginning in 2011-12. Over the next 20 years, this is expected to provide DND and the CF with an additional \$12

¹ For the purpose of this report, when referring to an organization, publication or product, the Canadian spelling of the word "defence" will be used. In all other instances, the word will be spelled "defense."

billion. The defense program consists mostly of fixed-cost elements such as infrastructure and equipment that have very long life cycles and require budgetary expenses to be locked in over many years, thus bringing long-term stability to the DND and the CF.

In addition to the increased dedication to the CF and DND, the Canada First Defence Strategy has created predictable long-term funding and better direction for future equipment acquisitions and replacements, therefore offering an excellent opportunity for industries – particularly defense - to develop new technologies that will support the future requirements of the CF. The Strategy then allows for significant opportunities for businesses in the high-tech and high-value shipbuilding, aerospace and defense sectors.

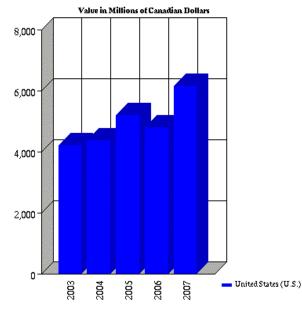
Canada is currently using the Sperwer UAV, produced by the French company <u>Sagem Défense Sécurité</u>, on its mission in Afghanistan. The Canadian UAV industry is composed almost entirely of small businesses that are operating in specific sub-areas within the business. Almost all of the business is export related – primarily to Canada's largest trading partner – the United States.

MARKET DATA

In 2007, Canada imported CAD\$7.5 million worth of aircrafts and spacecrafts such as helicopters, airplanes and spacecraft and their parts; parts of balloons, dirigibles and spacecraft; flight simulators, aircraft launching gear, deck arrestors and similar gear. Unmanned aerial vehicles manufactured in the United States are well received in the Canadian marketplace as the United States accounts for over fifty percent of UAV market share. This figure is expected to increase by 5-10% over the next decade. The close proximity of the United States to Canada allows for easy movement of goods and market integration. This coupled with similar defense industry preferences have resulted in excellent market

strength for U.S. made products among other foreign competitors. In 2007, Quebec was the largest importer of U.S made aircrafts and spacecrafts followed by Ontario and Alberta.

This chart is based on statistical data gathered from Industry Canada covering Canadian imports of Aerospace Products and Parts Manufacturing (NAICS Codes 3364, 33641, 336410) from the United States in the past 5 years, in millions of Canadian Dollars. NAICS Codes starting with 3364 comprise of establishments that are primarily engaged in manufacturing aircraft, missiles, space vehicles and their engines, propulsion units, auxiliary equipment, and parts thereof. The development and production of prototypes is classified in this industry, as is the factory overhaul and conversion of aircraft and propulsion systems.



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We can then determine that there has been huge growth in the export of aerospace technology from the United States in between 2006-2007, which can only continue to improve.

According to the <u>CIA World Factbook</u>, Canada currently spends about 1.1% of its Gross Domestic Product on military expenditures.

This chart identifies the 2007 U.S. exports to Canada within the aerospace industry, broken down by product line. Aircraft, Powered; Spacecraft and Launch Vehicles (HS Code 88) dominated the industry in 2007. Unmanned Aerial Vehicles fall under this category.



Import, export and local production

figures are based on estimates provided by industry sources and statistics published by Industry Canada and Statistics Canada. The following products, identified with their Harmonized System (H.S.) Codes are included in this analysis:

HS Codes	Description
88010000	"UAVs" having any of the following:
88021100	1. An autonomous flight control and navigation capability (such as, an autopilot with an
88021200	Inertial Navigation System); or
88022010	2. Capability of controlled-flight out of the direct vision range involving a human operator
88022090	(such as, televisual remote control).
88023010	3. Unmanned airborne vehicles including remotely piloted air vehicles (RPVs),
88023090	autonomous programmable vehicles and "lighter-than-air vehicles."
88024010	
88024090	
85269200	1. Equipment specially designed for remotely controlling the "UAVs" specified in Category Code 9A012.a.
	2. Guidance or control systems, other than those specified in Category 7A, specially designed for
	integration into "UAVs" specified in Category Code 9A012.a.
	3. Equipment and components specially designed to convert a manned "aircraft" to a
	"UAV" specified in Category Code 9A012.a.

STATISTICAL DATA - IN MILLIONS OF CDN\$

	2003	2004	2005	2006	2007	2008 (projected)
Total Imports	4,866	4,887	6,469	5,934	7,513	10,313
Total Exports	11,075	9,445	9,661	10,017	10,853	10,038
U.S. Imports to Canada	2,384	2,444	3,203	3,051	4,238	7,710
Consumer Price Inflation (%)	-	-	2.2	2.0	2.1	1.9
Exchange Rate C\$:US\$	1.4	1.3	1.21	1.13	1.07	1.04

TOP IMPORTS TO CANADA (HS 88) BY PERCENTAGE

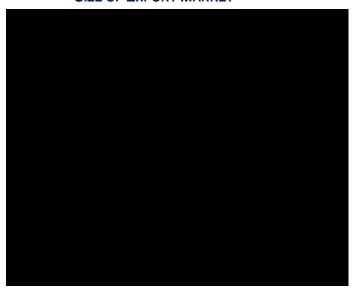
Country	2003	2004	2005	2006	2007	2008 (projected)
	4.0	= 0	= 0	- 1	= 0	
United States	49	50	50	51	56	79
Brazil	-	1	8	8	10	8
United Kingdom	17	19	13	12	9	4
Japan	3	5	6	8	6	4
France	17	14	5	6	5	4
Austria	-	-	-	-	1	1
Other	14	11	18	15	13	-

The above chart is a reflection of the world's market share in Canada in the Aircraft and Spacecraft (HS Code 88) sector. This chart encompasses all sub-headings under the code and therefore not just unmanned systems. The United States clearly dominates the Aircraft and Spacecraft industry in Canada, with its figures rising annually.

TARGET EXPORT COUNTRIES



SIZE OF EXPORT MARKET



MARKET FACTORS

	2007	2008	2009	2010	2011
Real GDP Growth (%)	2.7	1.0	1.9	2.4	2.5
Consumer Price Inflation (%)	2.1	1.9	2.1	2.1	2.2
Exchange Rate C\$:US\$	1.07	1.04	1.09	1.08	1.08
Population (in millions)	32.9	33.3	33.2	-	-

BEST PROSPECTS

Starting in 2020, 10-12 maritime patrol aircraft will be procured to replace the Aurora fleet. The new aircraft will become part of a surveillance "system of systems" that will also comprise sensors, unmanned aerial vehicles and satellites and keep Canada's maritime approaches safe and secure, including in the

Arctic. Canada also plans to bolster its forces in Afghanistan by providing more unmanned aerial vehicles.

KEY SUPPLIERS

MAJOR DOMESTIC SUPPLIERS

<u>MacDonald, Dettwiler and Associates Ltd. (MDA)</u> - Richmond, BC, Canada MacDonald, Dettwiler and Associates Ltd. (MDA) was incorporated in 1969 by two British Columbia entrepreneurs, John MacDonald, and Werner Dettwiler with the objective of providing innovative electronic solutions for complex customer requirements.

MMIST - Ottawa, Ontario, Canada

Mist Mobility Integrated Systems Technology Inc., (MMIST) is a world leader in the development, production and support of precision aerial delivery systems. Their main UAV product, the SnowGoose_{TMMC}, features a fully autonomous guidance navigation and control system based on their Sherpa_{TMMC} parachute control unit.

CDL Systems Ltd. - Calgary, Alberta, Canada

CDL Systems Ltd. is considered a world-leader in the development of ground control station software for controlling unmanned vehicles and remote surveillance equipment in manned and unmanned applications. Their Vehicle Control Station (VCS) was developed to usher in the next generation of vehicle control by allowing operators to focus on mission-centric details while operating the vehicle with relative ease.

MAJOR FOREIGN SUPPLIERS

Dassault Aviation - France

In the past sixty years, Dassault Aviation has delivered more than 7500 civil and military aircraft to 75 countries, logging some 20 million-flight hours to date. This has allowed Dassault Aviation to build up considerable expertise in the design, development, production, sale and support of all types of aircraft and a recognized and demonstrated know-how, innovative operational solutions, as well as a pragmatic and dynamic approach to co-operation to the world of UAVs.

EADS - France

EADS is a global leader in aerospace, defence and related services. EADS has a rather extensive UAV program because it has developed over ten different Unmanned Vehicle Systems that have been used by various armed forces throughout the world. EADS is also the only European company capable of meeting the requirements to supply both a large MALE (medium-altitude long endurance) UAV system, while at the same time engaging in preparatory work for the Advanced UAV program along with the German, French and Spanish ministries of defense.

Sagem Défense Sécurité - Paris, France

Sagem Défense Sécurité was one of the first to supply armed forces with a tactical UAV, the Crécerelle, which, with its Sperwer successors, now affords it a leadership position in this category in the Western world. It is the second-largest French group in the field of telecommunications and the third largest European company in electronics for defense and security. Recent development includes a small, portable UAV that can be transported on soldier's backs, and which can be assembled in the field, then launched by hand.

Israel Aeropace Industries Ltd. - Israel

IAI can be touted as the leader in the entire UAV industry. The company boasts an unmatched record of more than 350,000 operational hours of intelligence and targeting missions. This success is the result of

nearly a half-century of designing, engineering and manufacturing for the Israel Ministry of Defence and customers throughout the world.

PROSPECTIVE BUYERS

The most important prospective buyer in the Canadian market would be the federal government. The past year has seen a maturation of the perceptions of UAVs within the Canadian Department of National Defence (DND). Encouraged by the attainment of a tactical UAV in response to an urgent operational requirement for the Canadian Forces deployment to Afghanistan, UAVs have became a reality and help focus all of the Services on the demands and benefits of these new capabilities.

The GOC is implementing a new UAV program, reported to be worth \$120 million. DND will be leasing, rather than buying, the UAVs for two years, with the option of extending the contract for 12 months. These drones will be used to track insurgents from the sky rather than putting soldiers at risk on the ground. The UAVs will take over from the Spewer drones, and will fill the gap until the next phase of unmanned aircraft come on line in 2011-12.

Public Works and Government Services Canada (PWGSC)

This is the government's centralized purchasing agency responsible for overseeing federal procurement. Through PWGSC, the Canadian Government procures 17,000 different types of goods, services and construction a year, averaging 60,000 contracts with a total value in excess of US\$8.5 billion annually. PWGSC handles the procurement for more than 85 federal departments and agencies, as well as contracts for major Crown projects and Special Operating Agencies. PWGSC has the highest delegation of authority of \$3 million to acquire goods. PWGSC's competitive contracting authority can reach up to \$40 million. PWGSC's largest client department is the Department of National Defence (DND).

Note: In general, departments and agencies (such as the Department of Fisheries and Oceans (DFO) have the authority to buy on their own up to \$5,000 in goods. Any contracts exceeding this amount need to be approved by the Treasury Board. PWGSC will thereafter handle the procurements. However, sixteen departments have had their delegation of authority increased to \$25,000. Some of these departments include Health Canada (HC), Royal Canadian Mounted Police (RCMP) and Transport Canada (TC).

Department of National Defence (DND)

The Government of Canada's defense spending has reached the highest level since World War II with a budget of slightly more than US\$18 billion per year. As the sixth highest military spending economy in NATO, the GOC is a significant purchaser of defense and security products, including aerospace and electronic systems (for aircraft, ships, and military vehicles), computer hardware and software, custom-manufactured and commercially-available products; informatics services; marine equipment and armament; marine inspection and technical services; communications, audio-visual and printing services; research and development services; and, science and professional services. DND is currently the main user of UAVs. DND has the second largest delegation of authority of \$2 million to acquire goods.

The Department of Defence Research and Development Canada (DRDC)

Defence R&D Canada (DRDC) is an agency of the Canadian Department of National Defence responding to the scientific and technological needs of the Canadian Forces. Its mission is to ensure that the CF remains scientifically and operationally relevant. The agency is made up of <u>seven research centres</u> located across Canada with a corporate office in Ottawa. DRDC has an annual budget of \$300 million and employs 1500 people. With a broad scientific program, DRDC actively collaborates with industry, international allies, academia, other government departments and the national security community.

Department of Fisheries and Oceans (DFO)

The Canadian Coast Guard (CCG) is a civilian fleet, which is part of the Department of Fisheries and Oceans. Its responsibility is to respond to Search and Rescue (SAR) emergencies and environmental issues; to provide services for boating safety and icebreaking; and, to provide marine navigation services, marine communications and traffic services. The Canadian Coast Guard operates all the DFO vessels. The types of products procured by this department are mainly security motion detectors, enhanced communications and video surveillance systems.

Canadian Security Intelligence Service (CSIS)

The Canadian Security Intelligence Service (CSIS) plays a major role in protecting the national security interests of Canada by investigating and reporting on threats to the security of Canada.

Transport Canada (TC)

Transport Canada promotes safe and secure air, marine, rail, and road transportation to all Canadians through policy development, rulemaking, and monitoring and enforcement activities. The department works in cooperation with numerous federal, provincial and municipal organizations, and agencies on transportation issues.

Public Safety Canada

Public Safety Canada (PSC), formerly known as Public Safety and Emergency Preparedness Canada - PSEPC, was created in 2003. PSC is the department that most resembles the Department of Homeland Security. PSC ensures better integration and information sharing across government in relation to national security, emergency management, law enforcement and crime preventions, corrections and border management. They have an annual departmental and portfolio budget of \$6 billion. It is important to note that the Department itself is not a major purchaser, however, equipment, services and goods are purchased by the five agencies that they receive support from, namely:

- Canada Border Services Agency (CBSA)
- <u>Canadian Security Intelligence Service</u> (CSIS)
- <u>Correctional Service Canada</u> (CSC)
- National Parole Board (NPB)
- Royal Canadian Mounted Police (RCMP)

MARKET ENTRY

There are three principles that a company should follow once the decision has been made to sell its defense products to the Canadian Federal Government.

1. MAKE YOURSELF KNOWN

Take every opportunity to market yourself to the Canadian Federal Government. If the GOC doesn't know about your organization or your technology they will not be able to award you a contract. The following are a few examples of what you can do to "make yourself known." Companies should exhibit at trade events that target the defense industry in Canada, as well as in the United States. If you submit a bid for a contract, and are unsuccessful in winning the contract, ensure that you have a briefing from the procurement official. Make certain that you are in all of the appropriate GOC databases. Market your organization to key contacts, either by e-mail or post, in both the procurement side and the end-user side. The U.S. Commercial Service in Ottawa has many different methods of assisting companies in gaining market exposure.

2. IDENTIFY OPPORTUNITIES

The Canadian government's official Internet-based electronic tendering service MERX gives subscribers access to more than 1,500 open tenders from the federal government, provincial governments, and many municipalities, school boards, universities, and hospitals that are subject to Canada's trade agreements. Approximately 200 new tenders are posted daily.

The MERX system provides U.S. suppliers with easy access and excellent opportunities to sell a wide range of products and services to Canada's public sector. The Basic Subscriber package is free of charge providing U.S. companies with access to Federal Government procurement opportunities. From there, it is possible to search, view and download tender documents at no charge. This package also includes a free delivery of Opportunity Matching results, and one free Opportunity Matching Profile that automatically searches for opportunities of interest to a company's criteria in the profile it can create. In order to access opportunities, other than federal government opportunities, users must subscribe to one of the fee-based packages.

3. GATHER MARKET INTELLIGENCE

In order to keep up with what is going on in the defense and aerospace sector, subscribe to trade journals, newspapers, etc., so that you are aware of upcoming procurements. The best time to talk to GOC end-users about upcoming requirements is before they are posted on MERX. Once the opportunity is posted, you may only speak with the procurement official handling that particular project. It will be beneficial to have a person "on the ground" to keep you up-to-date and to market your organization/technology; therefore, making it a good idea to hire a local representative. The increase in military spending has created a greater demand for organizations that provide consulting/lobbying services to organizations wanting to increase their sales to the GOC. This is considered an effective method for U.S. companies wanting to penetrate this lucrative market. This option has already proven successful as this is the method in which the Canadian government purchased the original Sagem drones. Oerlikon Aerospace Inc. (presently, Rheinmetall Canada Inc.) is the local partner for the French company and therefore subcontracted to them to allow for the federal government's purchase. The U.S. and Foreign Commercial Service in Ottawa, Canada can assist U.S. companies in finding a representative to assist with market entry.

MARKET ISSUES AND OBSTACLES

According to Section 101.01 of <u>Transport Canada</u>'s <u>Canadian Aviation Regulations (CARs)</u>, an "Unmanned Air Vehicle" is a power driven aircraft, other than a model aircraft, that is operated without a flight crew member on board. UAVs are packed with high-tech apparatus that enable them to do this and currently have a great potential to scout the immense Canadian north. Basically, UAVs are an incredibly sophisticated extension of a remote-controlled aircraft that is operated either directly through the operators' laptop, by pre-programmed routes or global-positioning system (GPS).

UAVs in Canada are strictly regulated by the CARs. These regulations state that no person shall operate a UAV in flight except in accordance with a Special Flight Operation Certificate (SFOC). Operators must be able to demonstrate the predictability and reliability of a UAV, which essentially has the ability to perform in the desired environment. The requirement for an SFOC is intended to ensure the safety of the public and protection of other users of the airspace during its operation.

<u>Defence Research and Development Canada</u> has developed an aggressive program using modeling and simulation to investigate concepts of operations, sensor payload requirements, human factors and platform dynamics in order to evaluate the UAV's effectiveness in complex scenarios like training, mission rehearsal, as well as vehicle and sensor evaluation. Canada is an excellent potential market for UAVs because of training opportunities in <u>Goose Bay, Labrador</u>, which previously have been used as a strategic airfield, airplane ferry base, an air defense radar site, a NORAD deployed operating base of CF-18s, and for Allied Tactical Flying Training. The abundant infrastructure and large flying area

available make Goose Bay a natural location to establish a centre of expertise for flying, testing, development and training.

Selling to the GOC is not the same as selling to the USG. It is important to understand the methodologies, the players and resources available. For example, the GOC's fiscal year is from **April 1 to March 31** unlike the USG's fiscal year of October 1 to September 30. Another example is that the USG has "GSA Schedules" and the GOC has "<u>Standing Offers</u>". It is important for U.S. suppliers to understand these differences and treat selling to the GOC differently. The U.S. and Foreign Commercial Service in Canada can assist U.S. companies in understanding these differences.

Industrial Regional Benefits (IRB)

This policy was created in 1986 as Canada procures most of its major defense systems internationally. Therefore, this policy is designed to ensure that companies across Canada can gain benefits from these international procurements. It also provides the incentive for U.S. suppliers to partner with Canadian companies as team players or as subcontractors. Bidders are encouraged to identify business activities that make good business sense, regardless of where they are performed in Canada. U.S. companies should understand the importance of regional economic development in Canada and the fact that the Government has established a number of economic development programs for Designated Regions of Canada.

The IRB policy is applied to selected procurements that are valued at greater than two (\$2) million dollars and that are NOT subject to international trade agreements, namely, the North American Free Trade Agreement (NAFTA) and the General Agreement on Tariffs and Trade (GATT)/World Trade Organization (WTO) agreements on procurement; or, the federal/provincial Agreement on Internal Trade. With regard to international trade agreements, the IRB Policy can be applied to those sectors excluded from coverage as follows:

- **a.** defense related goods and services
- **b.** shipbuilding and repair
- **c.** urban transportation equipment
- **d.** Canadian Space Agency procurement
- e. communications
- f. certain information processing and related telecommunications services
- g. research and development

Advance Contract Award Notice (ACAN)

An ACAN is often times referred to as sole-source procurement. The Canadian government issues sole source contracts when they choose a supplier or contractor to fulfill a requirement without holding a competition. There are only certain circumstances when the GOC carries out procurements using this method. They are:

- 1) When there is a pressing emergency, e.g., if the air-conditioning system breaks down in a hospital in the middle of summer.
- 2) When it is not in the public interest to go competitive, e.g., requirements of national security, such as classified military or national defense project
- 3) When there is only one supplier or contractor, e.g., a company might be developing a prototype for a research and development project, or there may be logistical reasons that replacement parts must fit.

When departments indicate that there's only one source for procurement, PWGSC examines it carefully, and publishes an ACAN notice on MERX for no less than 15 calendar days. The purpose of this is to ensure there is truly only one source for the procurement and to indicate to the supplier community that it

intends to award a sole-source contract. If a supplier believes they can provide the product/service, the company may submit a Statement of Capabilities showing that they can meet the requirements set out in the ACAN. If PWGSC is convinced that there is more than one supplier, they will then post it on MERX as a competitive opportunity. However, if the procurement goes unchallenged, the supplier listed in the ACAN is awarded the contract.

The North American Free Trade Agreement (NAFTA)

American-made products enter Canada almost entirely duty free. The North American Free Trade Agreement (NAFTA) came into force on January 1, 1994 and replaced the U.S.-Canada free trade agreement, which was implemented in 1989. The phase-out of tariffs between Canada and the United States was completed on January 1, 1998, except for tariff-rate quotas that Canada retains on certain supply-managed agricultural products. Canada still maintains some non-tariff barriers of concern at both the federal and provincial levels, impeding access to the Canadian market for U.S. goods and services. However, recent studies show that 99 percent of all trade passes the across the border without incident or without controversial trade restrictions. Many Canadian standards are harmonized with U.S. standards.

Some non-tariff barriers that may exist for U.S. companies exporting to Canada could include language barriers because Canadian laws require that all products and product descriptions are written in both French and English. For further information, contact the <u>Canadian Border Services Agency</u>.

<u>Chapter Ten of the NAFTA</u> provides national treatment in Canada for U.S. companies on Canadian federal government procurement contracts above the following thresholds:

- Contracts of \$32,400 or more offered by a federal entity such as a Department or Agency for goods. The list of these federal entities was expanded to include Communications Canada, Transport Canada, and the Ministry of Fisheries and Oceans.
- Contracts of \$84,000 or more offered by a federal entity for services.
- Contracts of \$10.9 million or more offered by a federal entity for construction services.
- Contracts of \$420,000 or more offered by a Crown corporation or other federal government enterprise for goods and services. The list of these corporations includes the St. Lawrence Seaway Authority, The Royal Canadian Mint, the Canadian National Railway, Via Rail, Canada Post, and numerous others.
- Contracts of \$13.4 million offered by crown corporations or federal government enterprises for constructions services.

In addition to NAFTA, the WTO Agreement on Government Procurement (WTO-AGP) applies to most federal government departments. This multilateral agreement aims to secure greater international competition. The WTO-AGP applies to the procurement of goods and services valued at \$245,000 or more, and construction requirements valued at \$9.4 million or more.

PWGSC is responsible for ensuring conformity with Canada's trade obligations under the NAFTA and the WTO-AGP. PWGSC handles the federal government's procurement requirements in the following areas:

- architectural and engineering consulting services
- construction and maintenance services
- goods and services

In addition, the <u>Supplier Registration Information</u> (SRI) service is used by federal government buyers to identify potential suppliers for purchases not subject to any of the trade agreements (for which they use MERX). It is important for supplier to the GOC to be registered on the SRI.

TRADE EVENTS

Secure Canada

Ottawa, Ontario, Canada – Lansdowne Park September 30 – October 1, 2008

2008 UVS Canada Conference

Ottawa, Ontario, Canada – Brookstreet Hotel November 4 – 7, 2008

RESOURCES & KEY CONTACTS

Useful Government Websites:

- Public Works and Government Services Canada (PWGSC) the main portal of this Ministry.
 - ❖ To find out "Who buys what at PWGSC" it is recommended that you access the <u>Procurement Allocation Directory (PAD)</u> - This is a list of key purchasing contacts in PWGSC that includes links from these contacts to the products and services they buy. The GOC has a list of all <u>Departmental Material Managers</u> listed on their website. This link lists the Material Managers responsible for each of the Canadian Ministries by location.
- PWGSC's <u>Supply Manual</u>
- PWGSC's Standard Acquisition, Clauses and Conditions (SACC) Manual
- Business Access Canada general information on selling to the Canadian Government.
- Standing Offers and Supply Arrangements
- Industry Canada valuable trade information by sector.
- MERX Government Electronic Tendering Service
- The Canadian International Trade Tribunal Canadian Association of Defence and Security Industries
- Department of National Defence

Tel.: (613) 995-2534 Facsimile: (613) 992-4739

Defence Research and Development Canada

Tel.: (613) 991-4153 Facsimile: (613) 998-2675

Transport Canada

Tel.: (613) 991-4071

Toll Free: 1-800-305-2059 (North America only)

Facsimile: (613) 954-2340

Associations:

Association for Unmanned Vehicle Systems International (AUVSI) Canada

60 Queen Street, Suite 1206 Ottawa, ON K1P 5Y7, Canada

Telephone: (613) 234-7542 / Facsimile: (613) 234-5520

AUVSI-Canada is a national affiliate of the Association for Unmanned Vehicle Systems International (AUVSI), the world's largest and oldest non-profit organization dedicated to serving and promoting the global unmanned systems industry. Its primary focus is to increase awareness of Canada's leading-edge research and capabilities in fielding state-of-the art technologies and systems in the rapidly growing area of unmanned vehicle systems.

- Canadian Association of Defence and Security Industries (CADSI)
- Aerospace Industries Association of Canada (AIAC)
- The Armed Forces Communications and Electronics Association (AFCEA) Canada

Publications:

- Frontline Security
- Canadian Defence Review
- Aviation Week & Space Technology
- esprit de corps
- "Canada First" Defence Newsletter
- The Globe and Mail
- The National Post

CANADA FIRST - BUILDING BRIDGES TO PROSPERITY

FOR MORE INFORMATION

The U.S. Commercial Service in Ottawa, Canada can be contacted via e-mail at: lucy.latka@mail.doc.gov; Phone: (613) 688-5219; Fax: 613-238-5999 or visit our website: www.buyusa.gov/canada.

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