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I – INDUSTRY NEWS

AMPHITECH

<http://www.amphitech.com>

*** First sale of OASYS radar to CHL**

Amphitech has announced the first sale of its OASYS radar-based, helicopter-mounted, obstacle avoidance system to Canadian Helicopters Limited (CHL). The system will be installed on a Bell 212 helicopter operating in Labrador.

BOMBARDIER

<http://www.bombardier.com>

*** Official opening of new Mirabel facility**

On October 22, Bombardier Aerospace opened its new Montréal Mirabel aircraft assembly facility in the presence of Mr. Bernard Landry, Premier of Québec and Mr. Pierre Beaudoin, the recently appointed president of Bombardier Aerospace.

The factory is located in the Montréal International Trade Zone at Mirabel and covers an area of 300,000 sq ft (27,870 m²). Final assembly of the CRJ700 and CRJ900 began in August and 600 employees are currently working there.

*** Contract with REGA**

Bombardier Aerospace has reached an agreement with REGA, Swiss Air-Ambulance Ltd., of Zurich (Switzerland) for the sale of three Challenger 604 wide body business jets to be used in the air ambulance role. Delivery of the first two aircraft is scheduled for June 2002, with the third delivery expected in November.

*** Launch of the Global 5000**

On October 25, Bombardier Aerospace unveiled the new Global 5000 business jet, which will carry eight passengers and three crew members at a cruise speed of Mach 0.85 (903 km/h). This new product fits between the company's Challenger 604 and the Global Express. It will be capable of flying non-stop from Europe to central North America.

First flight is scheduled for the first quarter of 2003 and certification for the beginning of the following year.

*** Avionics upgrade for the Challenger 604**

The PrecisionPlus avionics upgrade for the Challenger 604 wide body business jet incorporates several new

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functions including automatic calculation of reference speeds and take-off thrust settings, and the display of the aircraft's flight plan in three dimensions.

Transport Canada and the U.S. Federal Aviation Administration have both certified the upgrade. It provides improved aircraft performance and offers flight crews improved situational awareness, greater accuracy and reduced workload.

CAE

<http://www.cae.ca>

* **\$25 M contract with Iberia**

CAE will supply a new Airbus A340-300 full flight simulator to Iberia equipped with a Maxvue Plus visual system. CAE will also upgrade a MD87/88 simulator which Iberia purchased from CAE in 1990. Both simulators will be installed in Iberia's Madrid training centre.

* **Three naval control systems contracts worth \$21 M**

BAE Systems (United Kingdom) has reached agreement with CAE on the extension of a contract, originally signed in 1999, for controls and instrumentation for the Royal Navy's Astute Class nuclear submarine fleet. California-based Northrop Grumman Marine Systems has ordered 12 gas turbine electronic control systems from CAE, which will be installed in the Royal Navy's new Type 45 destroyers under construction by BAE Systems. The third contract is with Newport News Shipbuilding of Virginia for a prototype electrical generation control system for the new U.S. Navy CVN 77 aircraft carrier.

* **Record \$370 M training contract with the Royal Navy**

FAST Training Services, equally owned by CAE and Alenia Marconi Systems, has signed a \$740 M contract with the British Ministry of Defence for the delivery of training services for Astute Class submarines. CAE's share of the contract is \$370 M in addition to other related subcontracts from FAST.

Delivery of these training services is scheduled to take place over a 30-year period, extendable to 40 years. They include operational and maintenance training for the first three nuclear submarines and could extend to three more. CAE will supply several platform and propulsion system simulators which, together with adjoining classrooms, will be installed in a training centre to be built by the FAST consortium at the Clyde naval base in Faslane, Scotland. The centre will commence operations in 2004.

* **Maintenance simulator for Japan Airlines**

CAE has signed a contract with Japan Airlines (JAL), valued at approximately \$10 M, for a Boeing 777-200 ER Maintenance Training Simulators (MTS). This sophisticated simulator will train the airline's maintenance engineers and technicians to carry out test and verification procedures on aircraft avionics and systems. It will be installed at JAL's Narita training

centre by the end of 2002. This is the third Boeing 777-200 MTS under construction at CAE. British Airways and Korean Air have ordered the other two.

* **Frontier Airlines becomes a customer for the Denver training centre**

CAE has announced a five-year agreement with Frontier Airlines to train pilots at the Denver aviation training centre which is scheduled to open in June 2002. Frontier Airlines thus joins Air Wisconsin, the lead tenant for the centre which will house six simulators. Training will begin in June 2002; Frontier pilots on the Airbus A320, Air Wisconsin pilots on the Bombardier CRJ200/700.

CAE has also announced the imminent start of operations at its Madrid aviation training centre, which will house four simulators. Lead tenant Air Nostrum will begin pilot training on a Bombardier CRJ simulator in December. The second simulator, a Bombardier Dash 8, will be installed in March 2002, and the two remaining ones 18 months later. CAE currently has a network of nine aviation training centres in seven countries worldwide. Five of them are already operational, while the remaining four are under development.

CMC ELECTRONICS

<http://www.cmcelectronics.ca/>

* **\$US9 M of options from the U.S. Army**

CMC Electronics has received additional contract options valued at \$US9 M from the U.S. Army. They relate to the supply of additional AN/TRC-190 communications shelter upgrades, including CMC Electronics' latest generation AN/GRC-245 High Capacity Line-Of-Sight (HCLOS) radio. Total contract value now exceeds \$US40 M.

* **Marketing agreement with Northrop Grumman**

The Navigation Systems Division of Northrop Grumman (formerly Litton Aero Products) has signed a marketing agreement with CMC Electronics. Under the terms of this agreement the companies will jointly market Northrop Grumman's inertial and attitude systems and CMC's flight management and Global Positioning (GPS) systems to civil and military markets.

* **Qantas selects a CMC Satcom antenna**

Qantas has selected CMC Electronics to equip its new fleets of six Boeing 747-438ER and 13 Airbus A330-200/300 with its high gain satellite communications antenna. Deliveries are scheduled to begin in early 2002, extending through to 2003.

CS COMMUNICATION ET SYSTÈMES CANADA

<http://www.c-s-canada.ca>

* **Technical assistance agreement with CMC Electronics**

In the context of its development programs for high technology electronics equipment for the aviation market, CMC Electronics has reached a technical

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assistance agreement with CS Canada relating to avionics engineering.

CS Canada will supply CMC Electronics with expertise in airborne software, particularly in civil aviation applications such as the Future Air Navigation Systems (FANS) and Flight Management Systems (FMS). CS is already developing airborne software for a range of international aerospace companies including Thales Avionique, Rockwell Collins, EADS, etc.

DTI-INFOGRAMES

<http://www.infogrames.com>

*** International specialist in games for In-Flight Entertainment (IFE) systems**

DTI-Infogrames is a specialist in the development and distribution of games for use in In-Flight Entertainment (IFE) systems. The company has experienced one of the highest growth rates in the sector thanks to agreements which it has signed with 15 airlines in recent months. Games developed by DTI-Infogrames are installed, or soon will be, in close to 150 aircrafts operated by airlines around the world.

HÉROUX-DEVTECH

<http://www.herouxinc.com>

*** \$44.2 M in contracts**

The most notable of these new contracts, which were primarily won by the Landing Gear Division, is an order from Goodrich valued at \$17.3 M. The other contracts are from large customers such as the U.S. Government, Bell Helicopter, Messier Dowty and Boeing. Around 35% of deliveries are scheduled for 2002, 58% for 2003 and the balance in 2004.

*** 2001 Entrepreneur of the Year**

Mr. Gilles Labbé, president and CEO of Héroux-Devtek Inc., has been named "2001 Entrepreneur of the Year" for the Québec region by Ernst & Young in the context of its Québec Entrepreneur Of The Year Program.

HONEYWELL

<http://www.honeywell.com>

*** Appointment**

Mr. Jim Robbins has been appointed general manager of Honeywell's Montréal facility. Mr. Robbins has held several positions at Honeywell including in the support group of the Engines and Services Division at Phoenix and in after-sales services at Raunheim, in Germany.

LYRTECH

<http://www.lyrtech.com>

*** Contract pour LYRtech**

The Defence Research Establishment Valcartier (DREV) has awarded a contract to LYRtech's defence and aerospace division for the development of radar technologies. These technologies will be embedded in

an all-terrain vehicle project, and will be used for reconnaissance and data analysis. The development of new radar detection technologies is one aspect of a wider initiative to develop future systems for combat vehicles and a defensive aids system. LYRtech's management estimates that it has signed contracts worth close to one million dollars with DREV during the last twelve months.

OERLIKON CONTRAVES

<http://www.oerlikon.ca/>

*** New corporate name and logo**

Oerlikon Aerospace, a Canadian leader in systems integration, has adopted the name Oerlikon Contraves. The new logo conveys that it is now part of the Rheinmetall DeTec group of companies.

The alliance with the Rheinmetall Group and with Oerlikon Contraves (Switzerland) will increase the company's visibility in international markets by making its products and services better known.

PARTENAIR DESIGN

<http://www.partenairdesign.com>

On October 20, the S45 Mystère made its first flight. The S45 is a two seat aircraft made from composite materials and powered by a Lycoming O-320 engine.

On November 18, the aircraft performed a complete series of flight tests at Mirabel airport. It was equipped with an Isaac data acquisition system for these tests. (<http://www.isaac.ca>)

PRATT & WHITNEY CANADA

http://www.pwc.ca/www/en_pwc/index2.asp

*** Polish Air Force order for eight C-295 aircrafts**

The Polish Air Force has ordered eight C-295 transport from EADS – Spain (formerly CASA). They will be powered by Pratt & Whitney Canada PW127G turboprop engines and are scheduled for delivery between 2003 and 2005.

*** Six EC135s with PW206B2 engines for the Swedish police**

Eurocopter has sold six EC 135 helicopters to the Swedish Police. They will all be powered by Pratt & Whitney Canada PW206B2 turboshafts. The first helicopter was delivered on August 10.

*** Pratt & Whitney Canada receives two orders from the PRC**

COHC, one of the leading civil helicopter operators in China, has selected P&WC engines for its new light twin helicopters. COHC has ordered one Agusta A109 Power, equipped with PW206C engines and a Eurocopter EC135 fitted with PW206B2 engines. The two orders also include options for three EC135P2 and two A109E helicopters, convertible at a later date.

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*** Pratt & Whitney Canada celebrates the delivery of the 1000th PW500 engine to Cessna**

Pratt & Whitney Canada has celebrated the delivery of the 1000th PW500 engine to Cessna Aircraft Company. The engine was a PW545A which powers the Citation Excel. The PW500 turbofan family includes three engine models, the PW530A, PW535A and PW545A.

*** P&WC will power the Falcon 7X under a contract of more than \$US3 Billion**

Pratt & Whitney Canada (P&WC) will supply an integrated powerplant system including three PW307A engines for the Dassault Aviation Falcon 7X. This program represents more than \$US3 billion of business over its complete lifecycle. The PW307A will set new standards for cabin comfort thanks to refinements in noise and vibration attenuation achieved by use of best practices and experience gained with the PW300 turbofan family.

*** Successful first flight of the Falcon 2000EX**

The Falcon 2000EX, Dassault Aviation's most recent business jet, which is powered by two PW308C engines, completed a successful first flight on October 25 from Mérignac, France. Certification of the PW308C is scheduled for the Fall of 2001. This is the most recent and largest member of Pratt & Whitney Canada's PW300 family. Certification of the Falcon 2000EX is scheduled for the third quarter of 2002, with service entry in 2003.

TECNICKROME

<http://www.tecnickrome.com>

*** Symposium on surface treatment processes**

On October 11, Tecnickrome organized a symposium on metal treatment processes which can improve the efficiency of aerospace supply chains. 60 people from 18 companies attended the event. Tecnickrome, which offers a wide variety of surface treatment processes, presented:

- its application of "Value-Added Production" which includes adaptation of the concept to its specific needs and thus optimize production,
- its methods of communicating with customers,
- a software tool to more easily convey the status of all orders placed by a customer,
- causes of delays and the information systems needs of customers to reduce them.

Reaction to the event was very positive and follow-up meetings on some of the topics discussed will take place.

WAIMEA

<http://www.abmi-groupe.fr/>

*** Waïmea becomes a subsidiary of Groupe ABMI**

The French Group ABMI has acquired Waïmea Technologie Inc (WTI). Waïmea provides specialized

services in New Information Technologies (NIT) and documentation engineering for all industry sectors.

ABMI is a multi-disciplinary company active in auditing, project management, product design, CAD/CAM, analysis, prototyping, tooling and training.

II - TECHNOLOGY

CONVERSION OF TECHNICAL DATA

At the request of their customers, software suppliers are increasingly offering modules for the conversion and reading of technical data according to the ISO 10303 standard, formerly known as STEP. STEP was adopted in 1995 to establish universal converters, known as applications. The most used application to-date is 203, which is resident in CATIA and ProEngineer, and is used for 3D geometries. It has superseded the IGES format, whose reliability is questionable.

STEP allows a widely-based exchange of complex technical data amongst heterogeneous systems. It includes life cycle management as well as data related to topography, functions, tolerances, material properties, product quality and configuration management, etc. STEP will have several levels of implementation, from simple file transfer to access to knowledge-based systems.

The status of the various applications of this standard (i.e. published, under study) is available at the web site "STEP ON A PAGE" (<http://www.nist.gov/sc5/soap>).

The CanSTEP group of the National Research Centre of Canada also offers a range of related services. The director is Susan Gillies at (519) 430-7094. (http://www.nrc.ca/imti/canstep_f.html)

ELECTRONIC COMMERCE PLATFORM FOR PASSENGER SERVICES

Askinflight.net is a new subsidiary of Montréal company Logisil whose mandate is to act as a B2B marketplace between airlines and their suppliers, primarily targeting services such as catering, in-flight entertainment, galley equipment, etc. Suppliers can also use this service to launch their products and services.

TOOL FOR MANUFACTURING METHODS SPECIALISTS

There is a need for a software tool to facilitate the design and analysis of manufacturing and assembly methods. Furthermore, no existing software provides for the linking of engineering (CAD/CAM) and manufacturing (ERP) systems. The PolyCAPP (Computer Aided Process Planning) software system, the result of six years of research and development at the École Polytechnique of Montréal, now provides for this integration between CAD/CAM/PDM and ERP systems, as well as the management of manufacturing know-how which will contribute to an acceleration of the product development timeframe.

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One customer has achieved the following results:

- a more than 15% reduction in development cycle time;
- a 30% reduction in engineering changes;
- a significant reduction in rejections;
- more effective documentation of internal manufacturing process know-how, resulting in the retention of expert knowledge and a reduction in training time of 50% to 70% for people working in the methods department.

To learn more, simply visit the web site www.polycapp.com

III – INDUSTRY DEVELOPMENT

QUALITY

* **One hundred and thirty seven ISO-registered companies**

ABB Bomem - Abipa - ABMI - Advantech - Aéro Ltée - Aéronav - Aérosystème - Aérotech Tubetronics - Agence Mécanique Paré - Airborne - Air Data - Air Terre Équipement - Almaho - Alpha casting - Alta Précision - Amphenol Air LB - Apex Précision - Apollo Micro-Ondes - Aquacoupe - Arell - Automatech - Avcorp Industries - Aviamatic - Aviation Lemex - Bedco - Bell Helicopter - Bombardier Aéronautique - CAE - CEL Équipements d'essai - Claro Précision - CMC Électronique - CMR - CPS Industries - CP Tech - Composites Atlantic - CRIQ Essais - Communications Multidev - CVDS - DCM - Deburex - Decatron - Delastek - Drummond - Élimétal - EMS Technologies - Farsound - Filetage International - Finecast - FJ inc. - Flexibulb - Focam - Générale Électrique du Canada - GFI - GGI - Guérette - Harbour - Harrington - Hemmingford - Henri Liné - Héroux-Devtek - Honeywell - Howmet (moulage d'aluminium) - James Dawson - JLM Précision - Lego - Les industries Profab - Les outillages K&K - Les treppeurs Thermetco - Lockheed Martin - LSI Luminescent - Lyre - Lyster - Mag-Chem - Marquez Transtech - MDS Aero Support - Mechtronix Systems - Mésotec - Metcor - Messier-Dowty - Mil-Quip - Minicut International - Nétur - NMF - Nutech - Oerlikon - Optimus - Outils Diacarb - PAM Électronique - Pega Précision - Performance L.T. - Perkin Elmer Optroélectronique - Placeteco - Pôle Air Aviation - Pratt & Whitney Canada - Précicast - Profab - Protec - Pyradia - Quéloz & Associé - Rasakti - RDC Contrôle - Robert Mitchell - Rolls-Royce - Rousseau Contrôles - R/D Tech - Sablage au jet 2000 - Sermatech - Shellcast - Sico - Sicotte - Sider-Tech - Sido - SNC TEC - Simtran - Soudure Aérospatiale - TEAM - Technique Design - Technimeca - Tecnickrome - Teco Precision - Tecsuit Eduplus - Termaco - Terminal & Câble TC - Thermetco - Tiger-Vac - TMH Canada - TNM anodisation et peinture - TQF Technologies - Tribospec - TRW Systèmes Aéronautiques - Turboquip - UDT - Ultraspec - Usinage P.L. - Usinage Meloche - Werner Metal - Wilson Machinerie.

If your company is ISO-registered, but is not on our list, please let us know.

* **Québec strategy in corporate competitiveness**

This fall, the Québec government launched the "Stratégie québécoise pour améliorer la compétitivité des entreprises" (Quebec strategy for the improvement of corporate competitiveness). With a \$83.5 M budget, the goal of this initiative is to create awareness in companies of best business practices, to encourage them to perform benchmarking exercises, to support the introduction of these practices by the performance of a competitiveness evaluation and the hiring of specialists, and to encourage the introduction of new products and the integration of international technologies and standards. For further information, contact your MIC regional director.

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V – SHOWS, EXHIBITIONS AND SYMPOSIA

AQA DINNER-MEETINGS

More than 200 people attended the dinner-meeting of the "Association québécoise de l'aérospatiale" (AQA), (Québec Aerospace Association), held on September 26. The invited speakers were Mr. Gunther Matschnigg, vice-president, operations and infrastructure of the International Air Transport Association (IATA), and Mr. Michael Piersdorff, sector development officer at Industry Canada. The upcoming dinner-meetings will take place on the following dates: November 21, 2001, February 20, 2002 and April 17, 2002. For further information, please contact the AQA at (514) 596-2388.

ACE

*** Aerospace Congress and Exhibition**

The Aerospace Congress and Exhibition (ACE), which was held in Seattle between September 10 and 13, was heavily disrupted by the events of September 11 in the United States. Nonetheless, around 12 Québec SMEs participated in the mission organized by the MIC, which shared a stand with the AQA for the occasion. The mission, organized with the cooperation of the Canadian Consulate in Seattle, included most notably, meetings with representatives of Boeing, Goodrich and Honeywell. This event will be held in Montréal in 2003.

NBAA

*** The business aviation convention**

The National Business Aviation Association (NBAA) has postponed its Convention in New Orleans until December 12 – 14. For further information, visit the NBAA web site at www.nbaa.org.

AHS

*** Forum 58 of the American Helicopter Society**

The American Helicopter Society (AHS) will hold its 58th annual Forum at the Montréal Palais des Congrès between June 11 and 13, 2002. Forum 55 was held in Montréal in 1999 (the first time the event had been held outside of the United States) and was a huge success. For additional information on Forum 58, which includes seminars and an exhibition, contact Gilles Brabant of the Aerospace and Defence Branch at 514-499-2199 local 5282.

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<http://www.mic.gouv.qc.ca/aerospatiale>