



## NEWS RELEASE

For Immediate Release

March 16, 2004

### ***Provincial Airlines Successful in Bid for Five-Year DFO Aerial Surveillance Contract***

**St. John's, Newfoundland** — The announcement today by the Honourable Geoff Regan, Minister of Fisheries & Oceans, that the Government of Canada has awarded Provincial Airlines a five-year, \$51 million contract to conduct aerial surveillance services in Canada was welcomed by Provincial Airlines and the local aerospace industry in general. The contract covers aerial surveillance services on the Atlantic and Pacific coasts and runs until 2010.

Gus Ollerhead, Provincial Airlines' President, stated, "This contract continues an excellent working relationship that has been developed between the company and DFO since we began providing fisheries surveillance services in 1986. The contract also recognizes the essential role that air surveillance continues to play in the 21<sup>st</sup> century in coastal zone management and protection."

The contract includes a highly sophisticated airborne capability for the detection and identification of targets of interest during daylight and darkness. Three aircraft will be provided; two operate from St. John's, Newfoundland, one operates from Halifax, Nova Scotia and, one operates seasonally in British Columbia. The contract also includes a highly innovative real time and post mission data collection and reporting capability, developed by Provincial Airlines' Software Development Department.

Provincial Airlines employs over 400 people in Canada; its aerospace and defence divisions operate throughout the world and are recognized as a leading provider of aviation systems integration, aircraft modification and software for aerial surveillance operations and support.

The new contract will provide an environment for the continuation of development of aerospace and defence capabilities by the company and will provide a stimulus for the aerospace and defence industry in the region. "This is a significant achievement for the aerospace and defence industry in Newfoundland and Labrador and will continue to stimulate development of that sector in this region.", says Paul Griffin, co-chair for the Aerospace and Defence Industries Association of Newfoundland and Labrador.

- 30 -

For further information contact:

Bob Halliday

Provincial Airlines Limited

Email [mediarelations@provair.com](mailto:mediarelations@provair.com)

Tel (709) 576-1800

Fax (709) 576-7363



## **Background Information**

### **Long-term Relationship with DFO**

Provincial Airlines commenced its relationship with DFO in 1986 and has been awarded previous Government of Canada contracts for fisheries surveillance in:

- 1990 – four years
- 1994 – five years
- 1999 – five years

The contract announced today by Minister Regan will commence October 1, 2004, following expiry of the existing contract, and continues until March 31, 2010

### **Technical**

Primary technologies currently being provided by Provincial Airlines under the DFO Air Surveillance Program:

- 3 fully configured Raytheon/Beech Super King Air 200 aircraft
- Litton APS-504(V)5 x-band ASW search radar
- FLIR Systems STAR Safire II gyrostabilized forward looking infrared system
- CALQuest Aeronautical SATCOM (4800 bps), near real time communication with ground server
- Airborne Data Acquisition and Management (A.D.A.M.) System VI (proprietary technology developed by Provincial Airlines)
- Nighttime illumination system for positive identification of vessels of interest at night (proprietary technology developed by Provincial Airlines)
- Automatic Identification System (AIS)
- Kodak DCS760, and DCS520 digital cameras for photography (also connected to nighttime illumination system)
- Various VHF/FM, HF radios
- Near real time and post mission links to the ground based Surveillance Information Server (proprietary technology developed by Provincial Airlines)



The surveillance aircraft are also equipped with the capability to identify vessels at night. They use a gyrostabilized forward looking infrared system to acquire target classification, and then use a visible light flash system attached to a high-resolution digital camera to acquire the vessel name and number in real time. In essence, missions can be conducted effectively anytime 24 hours per day, 365 days per year.

### **Government Agencies Utilizing the Service**

The Canadian Government agencies currently involved directly or indirectly with the Provincial Airlines' DFO Air Surveillance Program include:

- Fisheries and Oceans Canada
- Canadian Coast Guard
- Department of National Defence
- Department of National Defence Rescue Coordination Centre, Halifax
- Environment Canada
- Canadian Ice Service
- Transport Canada
- Royal Canadian Mounted Police
- Canada Customs and Revenue Agency
- Citizenship and Immigration Canada
- Solicitor General
- Other Government departments and agencies for maritime data

As well as:

- United States Coast Guard International Ice Patrol (Groton, CT.)

Although the primary mission is Fisheries, because of the detection and documentation capability of the aircraft, many of these Government agencies access the information from the surveillance program to assist in their own mandates.

### **New Technologies**

Canada has supported the implementation of new technologies for the maritime surveillance environment including Automatic Identification System ("AIS"), Vessel Monitoring System



(“VMS”) and High Frequency Surface Wave Radar. While these are sources of intelligence for a surveillance program, they are not a replacement for core assets such as aircraft and ships; they do, however, assist in the deployment of those assets and enhance their effectiveness.

Provincial Airlines has been aggressive in integrating these new technologies to achieve smarter missions and in many cases is the first in the world to move in this direction. Recently, the surveillance aircraft were equipped with AIS receivers for long-range detection and positive identification of commercial ships. Although this does not reduce the need to create an enforcement presence with the aircraft, it does permit the surveillance aircraft to be selective in determining which targets are of higher priority. Higher priority targets could include targets that are not transmitting AIS signals, but have been detected by the aircraft’s powerful anti-submarine warfare radar, or perhaps targets that have been repeat offenders. The surveillance aircraft operated by Provincial Airlines were the first in North America to integrate AIS technology.

In addition to AIS, Provincial has also been working with DFO to integrate VMS data onboard the surveillance aircraft in near real time. As positional data is received by DFO, it is sent to the surveillance aircraft through the onboard satellite communications system and received and displayed by the Airborne Data Acquisition and Management System. Data fusion of AIS data, VMS data and other sources of intelligence onboard the aircraft create a common picture of all surface based activity in the patrol area. The information is then used to assist the aircraft in determining higher priority targets, thereby resulting in more effective missions.

The introduction of these technologies will result in smarter patrols and effectively permit the surveillance aircraft to concentrate on targets of higher priority. The implementation will also mean the introduction of highly complex data fusion algorithms to provide the surveillance crew with an integrated picture of all of target sources of maritime intelligence.

These technologies will also result in more directed missions that are the result of detections in anomalies in the bigger surveillance and intelligence picture. There is a responsibility to react to detections by other systems, and these will result in the detections of targets of interest. These factors will help evolve the program even further over the next few years and will result in the broadening of the mission base and potentially aircraft use.

These developments will also drive another technology that Provincial will be the first in the World to develop and implement, the Airborne Data Server. This is a system that will result in high speed data communications wherever the aircraft are performing missions, and provide instant bidirectional access to ground based database systems and all sensors and information onboard the aircraft. The system will significantly enhance ground support decision-making capability as the surveillance aircraft collects and builds a complex picture of the patrol area.

