WORLD METEOROLOGICAL ORGANIZATION

WMO AMDAR PANEL
(Fifteenth Session)

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AMDAR PROGRAMME STATUS

Status Reports on National and Regional Programmes

AMDAR Programme Status Report for Canada

(Submitted by Gilles Fournier)

SUMMARY AND PURPOSE OF DOCUMENT

Provides a progress and activity report for the Canadian AMDAR Programme.

ACTION PROPOSED

1. The Panel is invited to note the information contained in the document.

PROGRESS AND ACTIVITY REPORT

1. NAV CANADA and Jazz Air continue to be the only active data contributors to the Canadian AMDAR Programme.

Current Status

Airline	Country of Airline	Aircraft Type (e.g. B737-400)	Number of Aircraft	AMDAR Software	Format On GTS (BUFR / FM42)
Jazz (Air Canada Express)	Canada	CRJ-100/200	20	ARINC 620-4 v2/3	BUFR
'NAV CANADA'	Canada	CRJ-200	2	ARINC 620-4	BUFR

2. About 50% of Jazz Air AMDAR fleet of CRJ-100/200 is off until a regular contract between Jazz Air and the Canadian government is setup. Signature of contract is expected in spring 2013. Jazz Air is gradually replacing its fleet of CRJ-100 aircraft with Q400s, which are not suited for AMDAR due to flat-plate temperature sensor. The Sabre-based AMDAR data Command and Control (C&C) system on the Jazz Air fleet is not yet operational and there is no indication if the C&C function of the AMDAR data will ever work.

3. NAV CANADA operates 2 AMDAR-enabled CRJ-200 for unscheduled Flight Inspection at most Canadian airports.

4. On June 28th conditional order placed by WestJet has been converted to a firm purchase agreement for up to 45 Q400 NextGen airliners from Bombardier Aerospace. This purchase is for WestJet's new regional airline they plan to launch in the second half of 2013. They are currently rushing to complete the setup of the new regional airline and currently do not have time to discuss AMDAR.

Development & Other Activities

5. On 24-25 April, 2012, Environment Canada's Weather and Environmental Monitoring (WEM) and Science and Technology (S&T) held a workshop to discuss technologies, user requirements, network planning and design, and science questions for the development of an optimum vertical atmospheric profiling system for Canada. A management meeting followed on 26 April, 2012, to discuss a way-forward and process ownership for such development. Short-term decision is to identify 2-3 'low-hanging fruit' technologies that could bring benefits in the short-term to be pushed forward. A second workshop to develop recommended plans for these identified technologies will be held in winter 2012-2013. AMDAR has good chance to be identified.

6. NAV CANADA will soon be replacing their 701 Unilink s/w on their flight inspection DHC-8 aircraft with the 801 Unilink version, from which the inappropriate temperature algorithm was removed.

They will be using the standard Universal Commuter airline database which includes an AMDAR option. The DHC-8 has the same additional temperature probes as Jazz Air and has inertial navigation system. Once the NAV CANADA DHC-8 produces AMDAR data, CMC will test it and, depending on the results, the Meteorological Service of Canada may be able to provide an analysis in support of upgrading Jazz Air's software so that AMDAR could be resumed on their DHC-8 fleet.

Future Plans

7. We are looking at the opportunity to present AMDAR benefits at a major airline managers meeting, likely in November 2012, and reassess the interests and opportunities.

8. If AMDAR is selected as one of the 2-3 'low hanging fruit' technologies to be pushed in the short-term for the future optimum vertical atmospheric profiling system for Canada recommendations to pursue activities to sustain and further enhance the Canadian AMDAR Program will be developed and presented to the WEM Management Committee (WMC).
