

WORLD METEOROLOGICAL ORGANIZATION

ET-AIR-3 and AMDAR Panel-14/Doc.3.4.1(11)

(22.IX.2011)

**JOINT MEETING:
CBS EXPERT TEAM ON AIRCRAFT BASED
OBSERVATIONS
(Third Session)
AND
AMDAR PANEL
(Fourteenth Session)**

ITEM: 3.4.1

Original: ENGLISH ONLY

(QUEBEC CITY, CANADA, 2-4 NOVEMBER 2011)

AMDAR PROGRAMME STATUS

Status Reports on National and Regional AMDAR Programmes

Established AMDAR Programmes

Status report on South Africa's AMDAR Programme

(Submitted by South Africa)

Summary and purpose of document

This document provides information on the activities and plans for the South African AMDAR Programme.

ACTION PROPOSED

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

PROGRESS/ACTIVITY REPORT

Current Status:

- SAWS experienced transmission problems, which led to huge data losses. This has been overcome by the recent completion of software upgrades from AAA V2 to AAA V3. Figures below are evidence that the successful completion of the software upgrade resulted in a significant increase in recorded messages on the GTS.

Figures (a) and (b) below show monthly averaged AMDAR data from registered airlines operating at different airports in Africa for the years 2010 and 2011. A comparison of the figures (a) and (b) for the consecutive aerodromes shows an increase in the monthly average reports for the year 2011.

Figure (a)

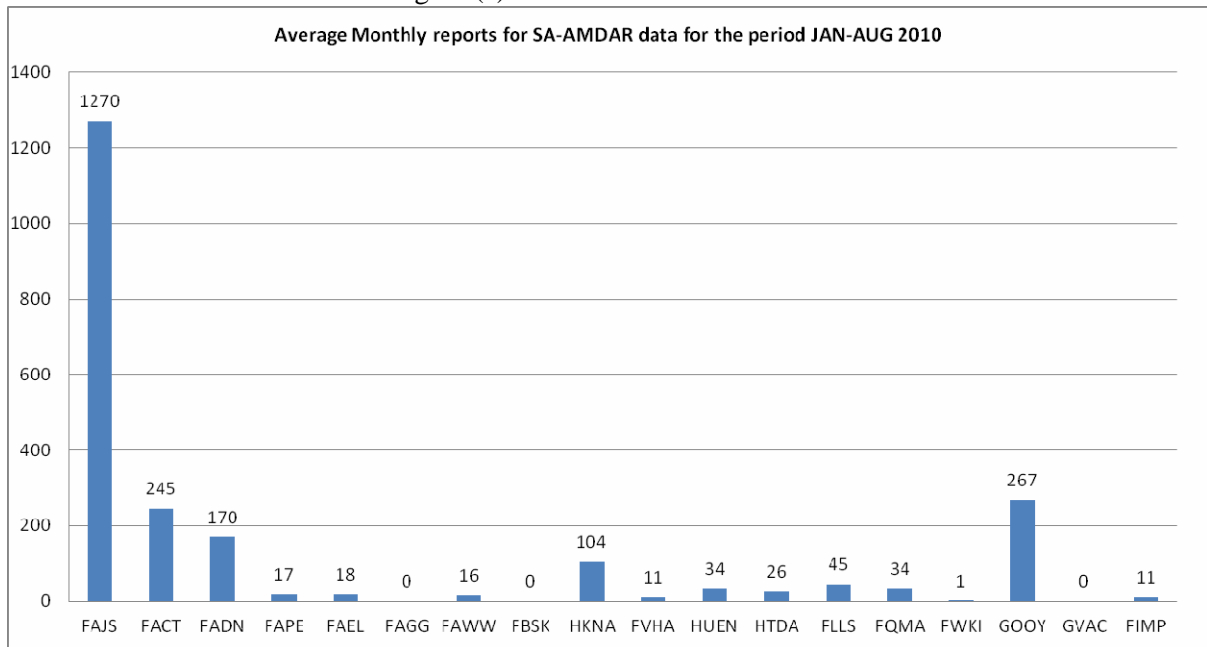
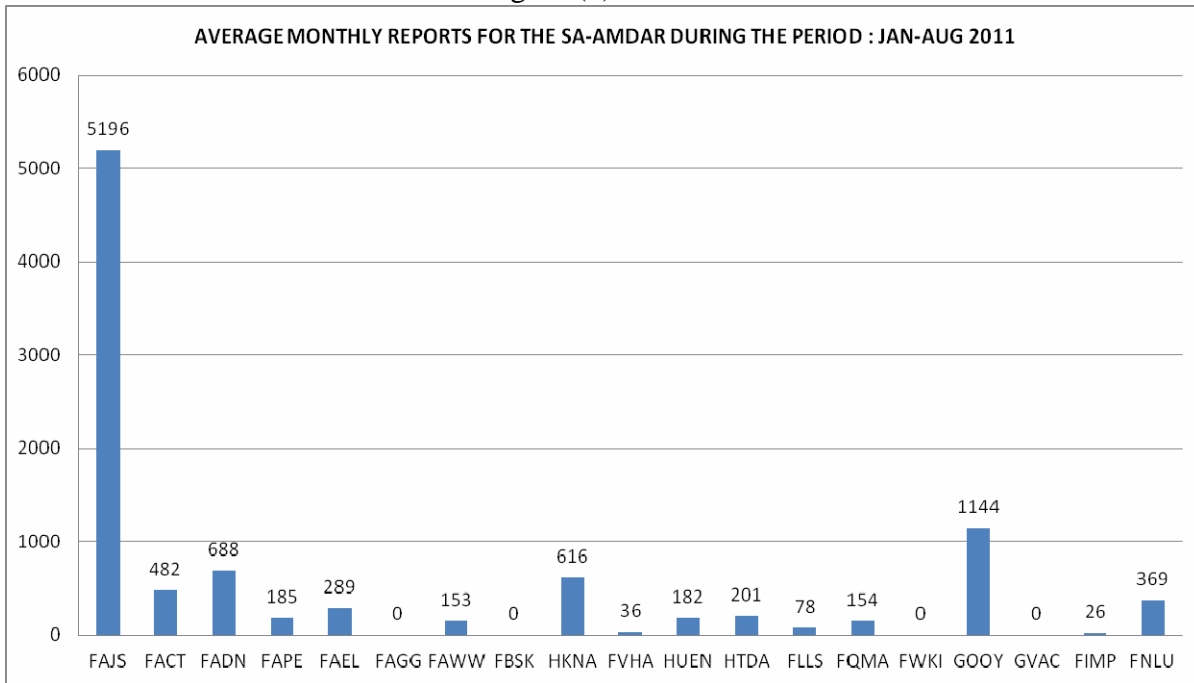


Figure (b)



Fleet Expansion and Improvement of Data Coverage

SAA has replaced its seven Boeing 747-400 aircraft with six airbus A330-200's , all having the AAA v3 software on board. SAA has also indicated its plans to expand the AMDAR fleet by adding A320 airbus to their fleet. The route to Beijing will be served by Airbus A340-300 and -600 aircraft.

Data Optimisation System

The number of observations received from participating airlines remains unchanged. However, there has been decline in the data received, due to challenge with the software upgrades which have been resolved. There is now improvement in the data received. Data optimization therefore remains an option in the long term if we could get additional national and regional airlines to participate in the programme.

Water Vapour Sensor Program

Progress has been made on the Water Vapour Sensor tests in Canada, which would result in high quality reference of humidity measurements. Following this humidity measurements breakthrough, some of the developed countries have already embarked on the installation of water vapour sensor on their participating aircraft. SA participating airlines have indicated no plans in the short term to install the water vapour sensors. However, SAWS is however keen in these humidity sensor measurements. For this reason, SAWS would like to appeal to the AMDAR panel to urge participating airlines to avail this data to some of the interested Members who have the necessary software to decode the data. Most importantly, is for the Panel to investigate possible joint programme to solicit funding for purchase of water vapour sensors for members in need.

Issues:

SAWS would like to raise the following issue for discussion and resolution:

- The need for the AMDAR panel to encourage and assist some of the Members to implement the AMDAR programme.
- To encourage cooperation between National airlines and National Meteorological Service through AMDAR panel.
- An increase in data would eventually result in the need to implement Data Optimisation System.
- SAWS would urge the AMDAR Panel to encourage development partners to work with member States and mobilize funding that would aid in acquiring the Water Vapour sensors.