

**Twenty Seventh Meeting of the
Informal South Pacific ATS Co-ordinating Group
(ISPACG/27)**

**Auckland, New Zealand
27 February – 01 March 2013**

Agenda Item 5.1 - Seamless Airspace Chart

Collaborative Flow Management

Presented by Airways New Zealand

SUMMARY

This paper provides a brief summary of activities supporting Collaborative Flow Management (CFM) in New Zealand

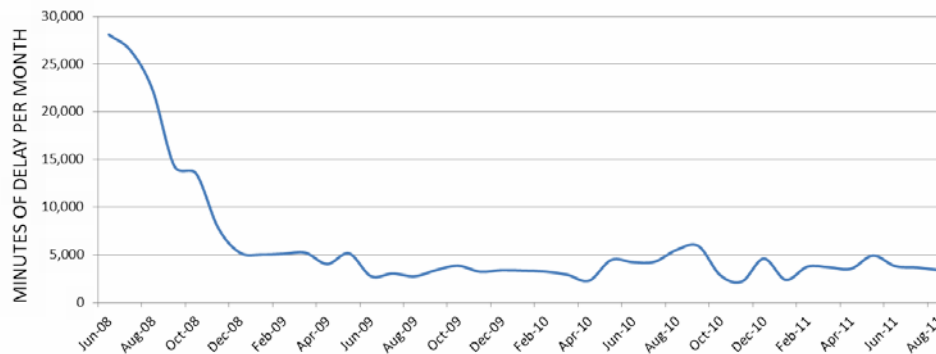
1. INTRODUCTION

- 1.1 In the late 1990's, New Zealand's main airports experienced daily airborne holding during peak periods typical of most hub operations.
- 1.2 As part of its Vision 2015 strategy, Airways has been working with industry since establishing systems to minimize the need for airborne holding at its main airports.

2. DISCUSSION

- 2.1 In 2008, Airways introduced the Collaborative Arrival Management system (CAM) to support operations at AA and WN. It has since been expanded to include operations at CH and QN.
- 2.2 The system is an automated, internet based system exchanging data with the air traffic management system and using it to calculate options to reduce delays in flight arrival times by distributing demand and allowing delays to be absorbed on the ground rather than once in the air (domestically). International flights are prioritised.
- 2.3 Key stakeholders have visibility into the system but airlines sort and prioritise their own flights. ATC adjusts the rate as appropriate but the airlines largely manage the system themselves.

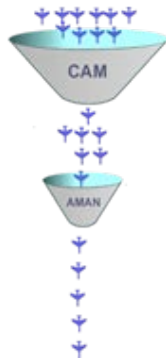
2.4 Since its introduction, airborne delays have been substantially reduced.



Average airborne delays at AA and WN

- 2.5 The system is robust in handling adverse weather conditions as well as sustaining operations through events such as numerous earthquakes and other interruptions. Furthermore overall performance has negated the need to establish a dedicated ATFM facility in ATC.
- 2.6 Operator compliance is extremely good with operators able to manage their own priorities. The system can support operations in multi runway environments and has been trialed at rates of up to 100 movements per hour.
- 2.7 CAM however does not provide the complete solution.
- 2.8 In 2010, Airways started work on developing the complete CFM solution by combining CAM with AMAN (based on OSYRIS from BARCO).
- 2.9 Taking a development before implementation approach, it has taken 2 years to streamline the system to provide a high degree of tailoring for the NZ environment and operations.
- 2.10 AMAN will be going live on 4 Apr 2013 for NZAA only initially.
- 2.11 Focus points are the feeder fixes at the boundaries of the TMA with RTAs issued 45 min ETA NZAA by enroute. Flights aim to hit the FF at the RTA thereby absorbing any delay.
- 2.12 The system will assign short or long STARS based on factors including traffic disposition and aircraft type.

- 2.13 The CAM function has already smoothed the flow into the airspace minimising adjustments in time. CFM is unique in this regards.



- 2.14 Following the initial trial period, it is expected that the system will provide increased fuel savings to operators with an objective of enabling predictable approach profiles with 80%+ of flights knowing and executing the issued STAR from TOD.
- 2.15 The system will involve a major “cultural change” for ATC with less intervention and more monitoring. Airways will continue to work with industry through this trial period to ensure changes are as seamless as possible.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- Note the information contained in the paper