

Review of the adequacy of aerodrome airspace risk management at Palmerston North International Airport.

Aeronautical study 11 to 13 March 2008.

Introduction

In March 2008 the CAA undertook an aeronautical study of the aerodrome airspace at Palmerston North Airport. The study was undertaken as a trial of the Aerodrome Airspace Risk Model developed by the Risk and Reliability Associates (R2A) Company which subcontracted to the Ambidji Company for the development of an Aerodrome Airspace Risk Management Study methodology for the CAA. The CAA adopted the Ambidji model as an acceptable means of conducting certain types of aeronautical study in late 2007.

Recommendations

As a result the Director of Civil Aviation has accepted four recommendations from the review. The four recommendations to be actioned are:

1. It is recommended that the training organisations, in conjunction with the Palmerston North Airport, develop a code of practice or memorandum of understanding dealing with the following issues:
 - a. the use of the circuit outside ATC hours including maximum numbers of aircraft in the circuit and procedures to be employed when IFR aircraft are joining;
 - b. improving the understanding amongst trainee pilots of IFR radio calls and procedures with regard to Palmerston North airport;
 - c. the segregation of the southern training area into blocks along with a slot reservation and trading system run by the organisations concerned; and
 - d. the provision of an instructor on the radio while night flying is in progress.
2. It is recommended that the Manawatu airspace user group investigates:
 - a. the establishment of 2 Common Frequency Zone's (CFZ) to the south of Palmerston North, split along the high tension line running from Mangawhata south past L366 from the CFZ. The eastern portion would be the training area on one frequency and the other on the Foxton frequency;
 - b. an agreement on standardisation of radio transfer points between the training area and Palmerston North ATC frequencies to minimise the area where aircraft could be on separate frequencies;
 - c. the use of entry and exit procedures/routes to the training area; and
 - d. the establishment of a sub-group relating to issues on Palmerston North airport to be co-ordinated by the Palmerston North Airport Ltd.

3. It is recommended that CAA evaluates the policy, legal and practical implications of implementing a requirement that all controlled airspace reverts to a Transponder Mandatory (TM) Mandatory Broadcast Zone (MBZ) when no ATC service is being provided, either after the hours of ATC watch or in the event of some failure in the ATC system.
4. It is recommended that the Palmerston North Airport monitor closely traffic levels and operational requirements of the aircraft operators and air traffic service provider with respect to upgrading the functionality of the parallel taxiway.

The Director also recommends a follow-up study be conducted at Palmerston North Airport after a period of 12 months from the full operation of the new procedures to assess the effectiveness and the resultant risk profile of Palmerston North International Airport.

The CAA Aeronautical Services Unit will co-ordinate the implementation of the Review recommendations. This document will be updated on the progress of implementation.

A Project Plan is detailed below including responsible person\organisation, the current status and projected completion for each recommendation.

If you require any further information please contact Mike Haines, Manager Aeronautical Services, hainesm@caa.govt.nz or 04 560 9429.

Palmerston North Aeronautical Study Project Plan – 7 April 2010

Recommendation	Responsibility	Status	Target Completion Date
1. Training organisations, in conjunction with the Palmerston North Airport, develop a code of practice or memorandum of understanding dealing with the following issues:	Palmerston North Airport Limited MOU developed by Training Organisations in conjunction with PNAL (Managed by Paul Kearney at Massey University School of Aviation)	MOU updated June 2009	COMPLETED
a. the use of the circuit outside ATC hours including maximum numbers of aircraft in the circuit and procedures to be employed when IFR aircraft are joining.	MOU Section 7 7.3.5 7.3.6	MOU updated June 2009	COMPLETED
b. improving the understanding amongst trainee pilots of IFR radio calls and procedures with regard to Palmerston North airport.	MOU Section 7 7.3 7.3.3	MOU updated June 2009	COMPLETED
c. the segregation of the southern training area into blocks along with a slot reservation and trading system run by the organisations concerned.	MOU Section 4 The users decided the procedure in the MOU was the most suitable option and to date after running it for almost a year there have been no changes required.	MOU updated June 2009	COMPLETED
d. the provision of an instructor on the radio while night flying is in progress.	MOU Section 7 7.3.2 This will be a suitably qualified person, not always a flight instructor depending on whether there is night rating pilot training being undertaken.	MOU updated June 2009	COMPLETED

Recommendation	Responsibility	Status	Target Completion Date
2. Manawatu airspace user group investigates:	Manawatu Airspace User Group		
a. the establishment of 2 Common Frequency Zone's (CFZ) to the south of Palmerston North, split along the high tension line running from Mangawhata south past L366 from the CFZ. The eastern portion would be the training area on one frequency and the other on the Foxton frequency.	This was discussed by the User Group at the last meeting on 17 June 2009 and it was agreed by all that this is not a workable option. The area has been divided into training sectors since mid 2008 which has been very effective in managing the traffic RT in the area. MOU has more workable solution.	N/A	COMPLETED
b. an agreement on standardisation of radio transfer points between the training area and Palmerston North ATC frequencies to minimise the area where aircraft could be on separate frequencies.	MOU Section 6 The user group would like to see this information published in the AIP arrival / departures at NZPM	MOU updated June 2009	COMPLETED
c. the use of entry and exit procedures/routes to the training area.	MOU 5.6 The user group would like to see this information published in the AIP arrival / departures at NZPM	MOU updated June 2009	COMPLETED
d. the establishment of a sub-group relating to issues on Palmerston North airport to be co-ordinated by the Palmerston North Airport Ltd.	MOU Section 9 The MOU is developed in conjunction with PNAL and requires a representative to attend MOU meetings twice a year held at the same time as the Palmerston North Users Group Meetings. PNAL believes User Group is small enough to not warrant separate subgroup	MOU updated June 2009	COMPLETED

Recommendation	Responsibility	Status	Target Completion Date
<p>3. CAA evaluates the policy, legal and practical implications of implementing a requirement that all controlled airspace reverts to a Transponder Mandatory (TM) Mandatory Broadcast Zone (MBZ) when no ATC service is being provided, either after the hours of ATC watch or in the event of some failure in the ATC system.</p>	<p>Manager Aeronautical Services</p>	<p>Being reviewed in the NZ Airspace and Air Navigation Policy currently being developed by CAA.</p>	<p>June 2012</p>
<p>4. Palmerston North Airport monitor closely traffic levels and operational requirements of the aircraft operators and air traffic service provider with respect to upgrading the functionality of the parallel taxiway.</p>	<p>Palmerston North Airport Limited</p>	<p>Consultation with users and Airways completed with actions taken.</p>	<p>COMPLETED</p>