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08 October 2013

Irene King
Chief Executive
Aviation Industry Association of NZ (Inc)
PO Box 2096
Wellington
6140

Dear Irene

Unattended Aerodrome Instrument Flight Procedure Services Review

Your letter of 3 October 2013 refers.

History of CAR Part 173

Prior to the introduction of Civil Aviation Rule (CAR) Part 173 instrument procedure design was undertaken by the Director of Civil Aviation. The Director delegated instrument procedure design to specific individuals mostly Airways NZ personnel.

The original development of CAR Part 173 and its associated Part 95 was commenced in 1998 as part of the original suite of Civil Aviation Rules that were developed under the Civil Aviation Act 1990 to replace the old 1953 Civil Aviation Regulations. Two notices of proposed rulemaking were published in October 1998 to provide for public consultation on the proposals to certificate air navigation service organisations for the purpose of devolving the design and certification of instrument flight procedures to appropriate industry organisations.

Due to delays and higher priority work the rule change was delayed. The draft final rule proposals from the 1998 NPRM were further consulted between 2003 and 2007, updated to take into account current legislative drafting practices and were significantly reformatted and redrafted into the style of other rules regulating organisations providing services to aviation in New Zealand.

The rule was finally processed and became effective in 2008.

Objective of CAR Part 173

The objective of CAR Part 173 is to ensure that the design, maintenance, and promulgation of instrument flight procedures intended for use by aircraft operating under instrument flight rules (IFR) in the New Zealand Flight Information Region (NZFIR) meet or exceed the International Civil Aviation Organisation (ICAO) standards and recommended practices for instrument flight procedures. CAR Part 173 achieves this objective by providing for the regulatory control and monitoring (entry certification and auditing) of organisations that

provide services for the design, certification, and maintenance of instrument flight procedures, and who make aeronautical data available for aircraft using the instrument flight procedures.

CAR Part 173 Requirements

It is important that instrument procedures are maintained and reviewed to ensure any changes to the obstacle environment can be addressed as soon as possible to ensure the procedure remains safe. Examples of changes are; new buildings or structures, temporary structure mainly cranes and growth of trees extending into the obstacle clearance area. Any intrusion into the instrument procedure obstacle free area can result in a safety issue for IFR aircraft.

It is important that an instrument procedure is not just designed correctly and implemented but that a CAR Part 173 organisation is responsible for on-going review and maintenance.

Airways Part 173 requirements

When the CAR came into force in 2008 all instrument procedures published in the AIPNZ were deemed to be compliant with the CAR Part 173 and were assigned to Airways to be the responsible organisation except where Airways had not undertaken the design e.g. Great Mercury, Wanaka and Ardmore aerodromes.

CAR 173.201(d) requires the written agreement of an aerodrome or heliport operator for IFR operations using the instrument procedure at their aerodrome or heliport. This is to ensure the aerodrome operator wants an instrument procedure designed for their aerodrome and to ensure that design meets the aerodrome operating requirements.

Airways began the process of getting aerodrome operator agreements in 2010 but have found several aerodrome operators not replying to letters for agreements to be put in place or have declined to do so. Due to pending timeframes and resources Airways are currently following up with those aerodrome operators who have not provided written agreement previously.

Instrument Procedure review

The requirement for maintenance of the instrument procedure is in rule 173.63 including a requirement for a full review of the procedure. The purpose of the periodic review is to ensure continuous compliance with changing criteria, to confirm adequate obstacle clearance and ensure that the IFP continues to meet user requirements.

CAA provided guidance on the review period in CAA Advisory Circular 173-1: *It is considered that the maximum acceptable period for an IFP review is 5 years.* Therefore the 5 year period for review of all published instrument procedures in place in October 2008 was October 2013. Given the volume of instrument procedures for Airways to review, which in 2011 was around 1450, CAA agreed to extend the period by an additional 2 years to October 2015 this was confirmed by CAA in writing in February 2012.

Safety issue

The reviews that Airways have completed have identified that the majority of the old procedures being reviewed take more resource than anticipated and date back to pre-1990 thus requiring a full redesign or major assessment. Additional to this survey data available from aerodrome operators are not up to date or cannot be provided.

Therefore until an instrument procedure is reviewed and reassessed the compliance of that procedure to safety standards is not confirmed.

Airways have assigned extra resource to these reviews but unless the aerodrome operator agrees in writing to the review then this cannot be completed.

Cost of instrument procedure

There is no legislative requirement on Airways to design an instrument procedure at any aerodrome location. However I understand that Airways have decided that at a location where Airways provide an air traffic control service they will recover the Part 173 instrument procedure design costs from their air traffic service charges.

At uncontrolled aerodromes Airways have no means of recovering costs and have advised aerodrome operators of the cost for providing a service to maintain and review the instrument procedures. This is a commercial decision for both Airways and the aerodrome operator to negotiate and work through.

This situation has identified that many instrument procedures at an aerodrome are no longer required and could be withdrawn. Therefore although an aerodrome currently may have one or more instrument procedures it is up to that aerodrome operator in consultation with users to identify which procedures need to be retained and which may be removed.

Alternatives

There is one other Part 173 instrument procedure design organisation, ASAP located in Europe but with a New Zealand representative to who an aerodrome may request pricing and design. Several other organisations have shown interest and meet with CAA to look to certificate under Part 173.

Summary

Instrument flight procedure design and maintenance is important to IFR operations safety. The Part 173 instrument procedure design certification process ensures that such organisations meet and design to minimum standards. The aerodrome operator must agree to instrument procedures being designed for that aerodrome and for that particular Part 173 to undertake the instrument procedure design and publication.

I am happy to discuss further as needed and provide further assistance.

Yours sincerely



Mike Haines
Manager Aeronautical Services