Australian Government Civil Aviation SafetyAuthority



SUMMARY OF PROPOSAL

Frequency use at low level in Class G airspace

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Introduction

Conjecture over the appropriate frequency to use at low level in Class G airspace has been an aviation safety matter for a number of years. This interest stems back to when CASA changed the information published in the Aeronautical Information Publication (AIP) in May 2013 that the appropriate VHF frequency to use in the vicinity (10 nm radius) of an aerodrome not published on an aeronautical chart was the Area VHF frequency. This was intended to address the risk for pilots of transiting aircraft monitoring the Area VHF frequency not being aware of the existence of an aerodrome and local aerodrome traffic being on the standard Common Traffic Advisory Frequency (CTAF) (126.7 MHz).

CASA's primary safety interest has always been ensuring that the benefits of 'alerted' see-andavoid are maximised. Primarily, this is by ensuring that pilots are monitoring and broadcasting, when necessary, on the same frequency.

CASA has conducted extensive consultation on this issue since early 2017 and is ready to provide advice to industry of what the appropriate frequency is to use at low level in Class G airspace.

Policy consultation

CASA published a Discussion Paper (DP) on 27 February 2017. The DP included two options which were:

- 1. Retain the use of Area VHF around aerodromes not published on aeronautical charts; or
- 2. Use what was termed "MULTICOM" (i.e. the standard CTAF 126.7 MHz).

Analysis of the 390 responses to the DP indicated that 54% of responses supported option 2, only 15% supported option 1 and 28% did not have a preference but would support either option.

In order to implement the majority acceptance of option 2, CASA published a Notice of Proposed Rule Making (NPRM) on 7 December 2017. Two options proposed jointly in the NPRM were to establish the use of the standard CTAF 126.7 MHz below 5,000 ft AMSL (A050) and increase the regulatory definition of "in the vicinity of a non-controlled aerodrome" to 20 nm radius and up to but not including A050. The expanded "in the vicinity of non-controlled aerodrome" definition was introduced in the NPRM to protect aerodromes with instrument approach procedures and busy aerodromes with discrete CTAFs from the potential frequency congestion on 126.7 MHz. Analysis of the 1,064 responses indicated that only 42.8% of respondents supported the joint proposal and 57.2% rejected the proposal.

Safety risk analysis

Noting that the proposal in the NPRM had some support for expanded 20 nm CTAFs for passenger transport operations and the NPRM responses still indicated majority support for "MULTICOM", CASA conducted a risk assessment consisting of three scenarios, the design of which could potentially alleviate the industry concerns expressed during the DP and NPRM responses.

1. Implementing the use of 126.7 MHz below A050 but only expanding the definition of "in the vicinity of a non-controlled aerodrome" to 20 nm for aerodromes with regular passenger transport (RPT) operations.

- 2. Implementing the use of 126.7 MHz below A050 with no change to the existing definition of "in the vicinity of a non-controlled aerodrome".
- 3. Maintaining the status quo but permitting the use of 126.7MHz in place of Area VHF in the circuit area of an aerodrome not published on an aeronautical chart.

The risk rating for the first two scenarios was extreme due to pilots being required to make three frequency changes in quick succession when operating to/from aerodromes with a discrete CTAF frequency i.e. Area VHF to 126.7 MHz to discrete CTAF and vice versa. This did not provide pilots with sufficient time to gain situational awareness of possible conflicting traffic.

The risk rating for the third scenario was low due to the small number of aircraft operating within the circuit area of uncharted aerodromes. Based on the results of the risk assessment CASA is proposing to implement the use of 126.7 MHz in the circuit area of aerodromes that are not published on an aeronautical chart.

Regulation impact assessment

This proposal does not require any regulatory changes so has no cost impact on industry and therefore does not require a regulation impact statement.

Proposal

Use of 126.7 MHz in circuit area of aerodromes NOT published on an aeronautical chart

The risk assessment for this proposal did identify a residual risk that transiting pilots could be unaware of the existence of an uncharted aerodrome. This could place aircraft in the vicinity of each other on different frequencies (Area VHF and 126.7 MHz).

Although the risk was assessed as low, the following existing measures have been identified that mitigate some of the risks:

- 1. IFR aircraft operate at or above lowest safe altitudes and at IFR cruising levels and therefore above circuit height.
- 2. VFR pilots operating at or below circuit height are already navigating visually and need to use see-and-avoid techniques to avoid rising terrain and obstacles (telecommunications towers, power lines and wind turbines etc) so will also need to be looking out for uncharted aerodromes.

The following reasonable additional measures have been identified to allow this proposal to be implemented safely:

- 1. Containing the use of 126.7 MHz to the circuit area (i.e. 3 nm radius and up to and including 1,500 ft AGL) will confine the residual risk to the low-level area in close proximity to an uncharted aerodrome
- 2. For uncharted aerodromes that are located within the vicinity (10 nm) of a charted non-controlled aerodrome pilots must monitor the designated frequency for that aerodrome
- 3. CASA will recommend that 'busy', currently uncharted, aerodromes be published on aeronautical charts
- 4. When operating at an altitude which could generate a conflict with the circuit area of an uncharted aerodrome, CASA will recommend that pilots capable of monitoring two frequencies monitor 126.7 MHz in addition to the Area VHF frequency

- 5. The AIP and CAAP 166-01 guidance will be appropriately updated regarding frequency usage at uncharted aerodromes. The use of 126.7 MHz for uncharted aerodromes will only be a recommendation and single-user aerodromes/ALAs may still use Area VHF where airmanship dictates this as appropriate
- 6. CASA will ensure that all aerodromes in the Airservices Australia database will be published on aeronautical charts unless verified that they no longer exist or where not possible due to chart clutter. This will ensure that there would be relatively few aerodromes that are not published on charts and further reduce the risk
- 7. This proposal would be accompanied by a significant industry education and training campaign.

Closing date for comment

CASA will consider any comments received as part of this consultation and incorporate changes as appropriate. Comments on the proposal should be submitted through the CASA Consultation Hub by close of business 14 May 2018.