
**2017 West Coast – South Island airspace
review
Final airspace changes**

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Introduction

This review has comprised all that airspace detailed on the C9, C10 and C12 visual navigation charts covering the area westward of the Southern Alps between Wekakura Point and Jackson Bay.

Initial notification of the review was made in June 2016 and users were invited to make submission for desired airspace changes by 5 September 2016.

There were 11 submissions received and a summary of these was published on 24 February 2017. A copy of the summary document is available on the CAA Airspace Review page - <http://www.caa.govt.nz/airspace/airspace-review/> – under the West Coast – South Island 2017 section.

The closing date for submissions to the proposed changes was initially 6 April, which was extended to 10 April to allow time for users to attend the consultation meeting held at Hokitika airport terminal building on 3 April and clarify any queries before making a submission.

Overview of submissions

There were eight submissions received by 10 April. Five of these were in regard to the proposed extension to the Southern Alps mandatory broadcast zone (MBZ). Air Nelson updated its proposed changes to the Hokitika MBZ to accommodate the minimum of 1500 ft above ground level (AGL) requirement for transponder mandatory airspace.

At the Hokitika user meeting, discussion was primarily about the proposed extensions to the Hokitika MBZ made by Air Nelson, including the updated petition. This proposal is detailed in the next section for user comment and submission.

CAA attended the Mt Cook and Westland National Parks Resident Aircraft User Group – East Coast meeting which was held on Tuesday 4 April at Pukaki aerodrome to present the proposed changes. This discussion was mainly focussed on the request for extension to the Southern Alps MBZ made by the user group.

Airspace changes

Controlled airspace

1. Amend lower level of control area NZA740

There has been no submissions received with regard to Airways' petition to amend the lower level of NZA740 between Fox Glacier and south of Barn Bay, from FL245 to FL175 to share a common lower limit with adjacent control area NZA948.

The lower limit of NZA740 will be amended to FL175.

Uncontrolled airspace

Danger areas

1. NZD723 Cape Foulwind

As stated in the Summary of Submissions document, NZD723 is no longer required and will be disestablished.

2. NZD715 Strongman Mine

The Strongman Mine has recently been sold to Birchfield Coal Mines Ltd. It has advised that this stage it is not in a position to revise the boundary as requested by NZHGPA.

The ongoing requirement for the danger area will be reviewed in the next 12 months. Meanwhile, the using agency details will be updated in the NZ Air Navigation Register and the AIPNZ.

CAA comment: A danger area advises pilots of a potential hazard to safe air navigation. Pilots may operate within a danger area provided that the pilot has determined the activity associated with the danger area will not affect safety.

Once the new using agency contact details have been published, hang glider/paraglider pilots could contact Birchfield Coal Mines to confirm if a hazard will exist at the times they wish to operate in this area.

Mandatory broadcast zones

Rule 71.157 allows the Director to designate a MBZ in uncontrolled airspace where the traffic density or special circumstances require that pilots within that zone make radio broadcasts of their positions and intentions.

Rule 91.135 requires pilots operating within a MBZ to make the following radio broadcasts and :

- when entering the MBZ
- when joining the circuit of an aerodrome within a MBZ
- before entering a runway for take-off at an aerodrome within a MBZ
- any other time at least at the intervals prescribed.

The pilot must also:

- maintain a listening watch
- activate, if equipped, landing or anti-collision lights

Pilots should also broadcast their position when necessary to advise other traffic of their location.

Within special use airspace, the Director may also designate the airspace as transponder mandatory if the traffic density in the airspace requires the operation of transponders to reduce the risk of an airborne collision with those aircraft that are required to be fitted

with an airborne collision avoidance system (ACAS). All air transport aircraft on passenger transport operations with a seating capacity of 10 or more are required to be equipped with an ACAS.

When designating uncontrolled airspace as transponder mandatory, the lower limit is generally at 1500 ft AGL or above for the following reasons:

- limitations in ACAS design and parameters – e.g. not compatible with circuit operations
- if transponder is unserviceable, there is no approval to fly to a maintenance base for repairs at an aerodrome within transponder mandatory airspace in a MBZ except if escorted by another aircraft in a formation.

1. NZB978 Southern Alps

There were five petitions received in regard to the proposed changes, primarily concerned with the amendment to the eastern boundary.

a. *Eastern boundary*

Air Safaris, based at Tekapo aerodrome, supported the amendment as the boundaries would include areas where helicopters from Lake Tekapo aerodrome and Mackenzie heliport are operating, as well as aircraft on approach and departure to the east and south-east of the aerodrome in a common transit area.

The proposed amendment was not supported by local and national gliding, hang gliding and paragliding organisations – Glide Omarama, Gliding NZ, New Zealand Hang Gliding and Paragliding Association (NZHGPA) and Canterbury Hang Gliding and Paragliding Club (CHGPC).

The NZHGPA submission detailed the current use of the area by hang gliders and paragliders:

'HG/PG are long established air users to the east of Lake Tekapo, flying in uncontrolled airspace on VFR Rules and NORDO. These operations are depicted by a HG Symbol on VNC C 12 Mount Cook 1:250,000 located at Sawdon Station (Long, lat; -44.040668, 170.551105) and to the north on the Two Thumbs Range (-43.826769, 170.670182). This area is widely used for competitions, cross country and training flights.'

The CHGPC submission explained the difficulty which hang glider and paraglider pilots have in using VHF radios when flying, which would be exacerbated by the five minute reporting requirement in Southern Alps MBZ:

'Hang glider and paraglider pilots face difficulties using an airband radio on the MBZ channel; Pilots need to use both hands for controlling their aircraft while keeping a full visual lookout.'

Operating a radio is typically by a press to talk microphone requiring one hand to come off the controls to activate the talk switch. Typically turbulent thermal conditions may result in an unacceptable delay in response to other aircraft users or temporary loss of control to the hang glider or paraglider pilot. Pilots generally use better performing Ham 2m or UHF Radios to communicate with fellow pilots or ground crew chasing for retrieve of pilots. For optimum safety our pilots update regularly and pass information which would not be suitable chatter to hear on the MBZ channel. Using an extra airband radio or switching between airband radio channels to talk to other pilots and ground crew, significantly increases workload and complexity for pilots flying aircraft that require constant input on the controls.

Motorised paraglider and hang glider pilots have extra expense and complexity of noise cancelling headsets if they are to use a radio. Our pilots can not lay maps or manuals out on their laps while flying, so reporting points are usually from memory.'

The submissions from the hang gliding and paragliding organisations also requested that the eastern boundary of Southern Alps MBZ be moved to align with the eastern shoreline of Lake Tekapo for the following reasons:

'The existing MBZ eastern boundary is not ideal for HG/PG pilots on VFR and NORDO flights trying to skirt around the MBZ. The current MBZ for HG/PG would actually be better served if slightly reduced in size and moved west to the Tekapo lake edge, so that pilots coming off the Two Thumbs range can land without having to enter low into the MBZ.

The lake edge is a far better landmark than the easily mistaken mountains in the Range. A line from the existing point at Mt Sibbald directly south to the existing south east point would be simpler for all, allowing safer landings for hang and paraglider pilots and a more practical flying area for all aircraft wishing to avoid the MBZ.'

While gliders are equipped with VHF radios and pilots have no difficulty in using a radio, Glide Omarama opposed the extension to the MBZ for the following reasons:

- '1. Traffic densities in the Tekapo area, as compared with the central area of the MBZ, do not warrant the extension.*
- 2. The original boundary was established in its current position to ensure that gliders flying along the Two Thumb Range were, in fact, operating outside the MBZ.*
- 3. Gliders flying along this boundary would continuously pass in and out of the MBZ as it follows a common glider flying route.*
- 4. The extended MBZ would at times greatly increase the amount of radio traffic on 118.6, the already crowded Mt Cook frequency. This is due to the compulsory 5-minute position reporting plus the glider's own separation chat.*

5. *The following flight traces, recorded between 1630 and 1530 on one day in January 2016, show 7 gliders that tracked north then south on typical Two Thumb Range soaring routes between 4,500 and 10,500 asl. Had they been required to make 5-minute reporting calls they would have generated 168 compulsory calls into the MBZ at a rate of nearly 3 calls per minute. This does not include glider to glider separation calls.*

6. *While gliders do not soar the Two Thumb Range on a daily basis they do they tend to arrive in numbers. On a contest day, there could easily be 20 gliders operating up and back along the proposed MBZ border in a two-hour period and their total communications on 118.6 could significantly compromise the safety of the whole Mount Cook MBZ.'*

Glide Omarama further proposed that instead of making the extension part of the MBZ, a common frequency zone (CFZ) is established as a buffer to the MBZ. In support of their proposal, Glide Omarama stated:

'This would encourage the sensible use of 118.6 without the legal obligations of compulsory reporting and the potential for the unnecessary overloading of the frequency. Other successful CFZs, such as Wanaka, are good operating examples which enable Gliders and others to make sensible reporting calls when appropriate.'

Gliding NZ also opposed the extension to the MBZ for similar reasons, as well as making the following observations:

'...Pilot workload and cognitive effort increase exponentially with the number of received position reports the overwhelming majority of which are irrelevant. Once overload occurs the radio reports become verbal wallpaper and the information both good and bad is ignored.

3. *Glider pilots will become increasingly restricted in exchanging non-position related information that is important for soaring but of little interest to powered aircraft operators. It is not uncommon for terse rebukes to be offered when such information is passed within the existing MBZ.'*

Gliding NZ further requested that consideration be given to reviewing the whole of the Southern Alps MBZ to possibly amend some of the eastern portions outside the sightseeing areas of Mt Cook, Glentanner and the Tasman Glacier to a common frequency zone on the same frequency. The supporting argument for this was that it would greatly reduce the number of position reports and allow for pilots of gliders and other transit aircraft to pass information relevant to their own particular type of operation.

b. South-western boundary

The submissions from NZHGPA and CHGPA opposed the extension to the south-western boundary for the same reasons stated above.

The issues raised were discussed at the user group meeting held at Pukaki aerodrome on 4 April.

The user group advised that the requested extension to the south-western boundary was not required and therefore would not proceed.

The meeting also agreed that the eastern extension could be a CFZ rather than a MBZ.

There was also discussion regarding the Gliding NZ request to review other portions of the MBZ to possibly change to a CFZ. Because there is insufficient time remaining to consider this fully before the cut-off date for 9 November update, this proposal will be deferred until the November 2018 update. Gliding NZ and Glide Omarama should progress this proposal with the user group and once agreed, submit a petition for change to the Director before the end of January 2018.

2. NZB774 Hokitika

NZB774 Hokitika was established due to scheduled passenger transport services, and designated transponder mandatory because the passenger aircraft used are ACAS equipped.

There were two submissions received from the West Coast (SI) Microlight Club and Tasman Hang Gliding and Paragliding Club (THGPC) to the proposed amendments to the Hokitika MBZ.

The concern raised by the West Coast (SI) Microlight Club is the transponder mandatory requirement in the middle section of the tiered MBZ as this would limit mountain flying. A 7000 ft lower limit would be preferable to enable mountain flying in the valleys and along ridge lines.

THGPC has requested that the northern boundary of the proposed MBZ extension be amended southwards to allow for hang gliding and paragliding takes place north of Greymouth at Point Elizabeth.

The updated Air Nelson proposal for four tiers of MBZ was discussed at the Hokitika meeting. There was general support for the proposed changes and the only issue raised was by the Tasman Hang Gliding and Paragliding Club representative with regard to the northern boundary. The amendment to the northern boundary was agreed to as there would be no affect to instrument procedures at Hokitika.

It was agreed at the meeting that the current five minute reporting interval would be excessive in the expanded MBZ. A 10 minute reporting interval would remove the need for multiple calls congesting the frequency. There is no specification which precludes a pilot from making more frequent broadcasts if necessary.

While not discussed at the meeting, the Summary of Submissions document (page 6) advised that the unattended aerodrome frequency 119.1 MHz currently used at Hokitika and Greymouth aerodromes would need to change for the expanded MBZ. At altitude the frequency would become cluttered by receiving reports at other unattended aerodromes

and those pilots who use wrongly 119.1 MHz as a de-facto unattended enroute frequency.

The final frequency is still being allocated. It has been requested that a frequency to one decimal place is used, as older radios may not have more than one decimal place selectability.

CAA comment: *There is merit in reviewing NZB774 as the original boundaries were designed around the NDB approaches and have not been updated to consider the introduction of RNAV approaches at Hokitika and Greymouth aerodromes.*

There are other locations in New Zealand where a tiered MBZ has been designated, but not to the extent or altitude that has been requested.

As stated earlier, the criteria for designating a mandatory broadcast zone if traffic density or special circumstances require pilots to make radio broadcasts.

The proposed MBZ would be split into two MBZs –

1. *Amended Hokitika MBZ NZB777 which would encompass the existing MBZ from the surface to 7500 ft AMSL, transponder mandatory above 1500 ft. The requested upper limit of 13,500 ft is not supported for the following reasons*
 - *Analysis of traffic statistics indicates that there is little VFR operating at higher levels*
 - *In any event, few aircraft types operating under VFR are suitably equipped for flight above 10,000 ft*
 - *FISCOM provides traffic information service to all IFR aircraft in uncontrolled airspace and VFR aircraft requesting such information.*
 - *The existing MBZ is transponder mandatory above 1500 ft*
 - *In published holding patterns for both Hokitika and Greymouth, the lowest safe altitudes are below 4000 ft.*
 - *The Hokitika Delta standard instrument departure requires aircraft to initially climb seaward of the coastline before turning to cross the HK NDB at a minimum of 5200 ft before intercepting track. The standard route from Hokitika to Christchurch is Q309, with a MSA from HK NDB to APASA (6 NM) waypoint of 4800 ft, and APASA to BELEE MSA of 10,000 ft. The climb profile of Q300 (Dash 8) aircraft would enable the aircraft to remain with both MBZs during departure.*
 - *Establishment of MBZs for enroute climb and descent on relatively infrequently used tracks well above traffic in lower airspace is not a conventional justification for designation of such special use airspace.*

2. *New MBZ East Hokitika NZB778 with two tiers – lower limits 4500 ft and 7500 ft – respectively to an upper limit of 13,500 ft, transponder mandatory above 7500 ft to allow for the non-transponder equipped aircraft to continue to operate as requested by the microlight club.*

Because of the higher transponder mandatory lower limit, the necessity for three tiers as per the amended Air Nelson proposal is no longer required and the original two tier proposal is used.

Refer to Appendix A for a diagram of the proposed amendment.

Visual reporting points

The following three new visual reporting points requested within the Southern Alps MBZ will be established:

Name	Coordinates
Tekapo Saddle	S 43 58 08, E 170 38 32
Mt Joseph	S 43 51 36, E 170 22 16
Irishman Creek Saddle	S 44 04 10, E 170 20 39

Miscellaneous

Hang gliding symbols will be added at the following locations:

Name	Coordinates
Sherry River	S 41 25 33.82, E 172 40 26.80
Mt Murchison	S 41 43 44.43, E 172 29 57.47
Stockton	S 41 38 48.89, E 171 51 02.53
Denniston	S 41 43 42.40, E 171 44 23.14
9 Mile Beach	S 42 21 11.77, E 171 15 17.29
Point Elizabeth	S 42 23 49.38, E 171 13 05.43
Sewell Peak	S 42 24 28.60, E 171 20 33.36
Mt Cheesman	S 43 09 24.00, E 171 40 15.00
Ohau Skifield	S 44 13 32.76, E 169 46 50.17

Consultation

This document will be sent directly to the organisations listed below. It would be appreciated if you would kindly forward the document to your members for comment and consideration.

Aerodrome operators (chartered aerodromes only)

- Fox heliport (Glacier Southern Lakes Helicopters Ltd)
- Franz Josef aerodrome (Air Safaris and Services (NZ) Ltd)
- Glacier Country heliport (Hokitika Airport Ltd)
- Glentanner aerodrome (Glentanner Park Ltd)
- Greymouth aerodrome (Grey District Council)
- Haast aerodrome
- Hokitika aerodrome (Hokitika Airport Ltd)
- Karamea aerodrome (Karamea Airport (Inc))
- Lake Haupiri aerodrome (Air West Coast Ltd)
- Makarora aerodrome (Southern Alps Air Ltd)
- Mount Cook aerodrome (Aoraki Mount Cook Ltd)
- Murchison aerodrome
- Murchison Hospital heliport (Nelson-Marlborough District Health Board)
- Pukaki aerodrome (Pukaki Airport Board)
- Tekapo aerodrome (Air Safaris and Services (NZ) Ltd)
- Westport aerodrome (Westport Airport Authority)

Operators, Organisations and User Groups

Major operators, organisations and users have been identified as:

- Air New Zealand Group – includes Mount Cook and Air Nelson
- Air Safaris and Services (NZ) Ltd
- Aircraft Owners and Pilots Association
- Airways Corporation of New Zealand
- Balloon Association of New Zealand
- Canterbury Airspace User Group
- Flying New Zealand
- Gliding New Zealand
- Golden Bay Air
- Hokitika Airspace User Group
- Model Flying New Zealand
- Mount Cook and Westland National Parks Resident Aircraft User Group
- Nelson Airspace User Group

- New Zealand Agricultural Aviation Association
- New Zealand Airline Pilots Association
- New Zealand Aviation Federation
- New Zealand Hang Gliding and Paragliding Association
- New Zealand Helicopter Association
- New Zealand Parachute Federation
- New Zealand Parachute Industry Association
- Recreational Aircraft Association of New Zealand
- Royal New Zealand Air Force
- Sport Aircraft Association New Zealand
- Sport Aviation Corp

This document is also available on the CAA website at the following link:

<http://www.caa.govt.nz/airspace/airspace-review/>

Notifications will be sent to CAA email notification subscribers to Airspace Notifications – Briefing Areas 6, 7, 8, 9 and 10.

If there are any further questions regarding the review process, please contact Paula Moore – contact details below.

Final submissions

Prior to making a designation or classification of airspace, Civil Aviation Rule 71.9 requires the Director to consult with all parties that may be affected within the aviation industry.

This document forms part of the consultation process. Final comment and submissions on new proposals included in this document are sought from any interested person, organisation or representative group.

Submissions are accepted either electronically or via mail.

Please address submissions to:

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PO Box 3555
Wellington 6140
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Reference: 2017 West Coast – South Island Airspace Review – final airspace changes

Closing date for final submissions to these proposals is **Wednesday 19 April 2017**.

Further information

For further information contact:

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Appendix A: Amended Hokitika MBZ and new East Hokitika MBZ

