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Group Executive Officer
Aviation Infrastructure and Personnel
Civil Aviation Authority of New Zealand
PO Box 3555
Wellington 6140

2016 MANAWATU AIRSPACE REVIEW

Air Nelson make the following submission to the above review.

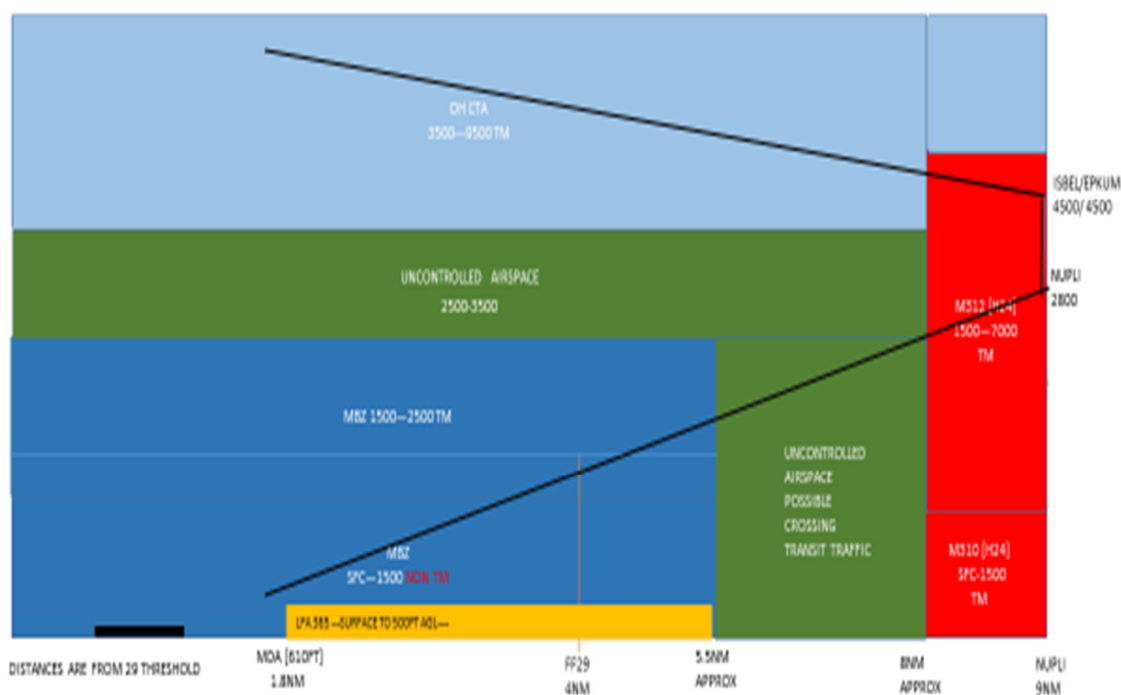
WANGANUI

We are aware of the submission and content that Wanganui District Council [Airport] has made regarding the Airspace surrounding Wanganui Airport.

We support that submission but would make the following additional recommendations.

- The proposed MBZ extension does not, in our opinion, extend far enough to the South. There is still a gap of no man`s land between the MBZ and OH airspace. Anyone conducting the RNAV 29 approach must transit this area.[refer below] Our thoughts are that the MBZ should be extended further South to meet up with the OH boundary. This would eliminate the no man`s land encountered on the RNAV 29 approach. Exactly the same rational as raising the MBZ to eliminate the gap between the MBZs upper level and controlled airspace.
- To enhance Crew situational awareness, particularly when conducting an instrument approach and transitioning to visual conditions, we strongly advocate that all MBZs be designated as transponder mandatory [TM] from the surface to the upper limit of the MBZ

WANGANUI RNAV RWY 29



PARAPARAUMU

- It is our understanding that the Gliding Club are to vacate PPQ in November 2015 and relocate to Greytown in the Wairarapa. G673 Kapiti Coast LLCA to 9500ft was created at PPQ to accommodate Glider flights in Northerly wave conditions. With the Glider Clubs relocation to the other side of the ranges it would seem highly unlikely that G673 is still required and could be disestablished.
- To enhance Crew situational awareness, particularly when conducting an instrument approach and transitioning to visual conditions, we strongly advocate that all MBZs be designated as transponder mandatory [TM] from the surface to the upper limit of the MBZ

**Airways New Zealand submission to the
Civil Aviation Authority's
2016 Manawatu Airspace Review**

**Prepared by: John Wagtendonk
Policy, Standards and Safety Improvement**

7 August 2015

At this stage Airways is not in a position to submit any requests for airspace changes in the Manawatu region. Any requests by Airways will predominantly be determined by airspace requirements for new performance based navigation (PBN) procedures. These procedures are still in development. Airways is aware that any petitions for airspace would need to be submitted to CAA by Christmas 2015 for an effective date of November 2016.

Dianne Parker

From: Griffin Ag-Air Ltd <griffair@inspire.net.nz>
Sent: Friday, 7 August 2015 2:16 p.m.
To: Paula Moore
Subject: 2016 Manawatu Airspace Review

Hi Paula,

I apologise for this last minute and short submission on the 2016 Manawatu Airspace review.

I make this submission on behalf of our company Griffin Ag-Air Ltd and other Agricultural Aviation operators who operate in the Palmerston North and Ohakea Airspace. Approximately 10 Agricultural Operators operate to varying degrees in the above Airspaces.

Agricultural Aviation plays a vital and important role in the management and economic wellbeing of N.Z. Agriculture especially during winter months when ground conditions stops all ground vehicles.

Therefore our Agricultural Aviation Industry would like it recognised in any Airspace review that our Industry be recognised as an important established user of Airspaces in Manawatu Airspace area.

We are willing to participate in any further review of the Manawatu Airspace.

Most Agricultural Aviation operations take place at short notice due to agricultural conditions and narrow suitable weather opportunities.

Regards

Hallett Griffin
Griffin Ag-Air Ltd
PO Box 668
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email: griffair@inspire.net.nz

Dianne Parker

From: Jason Russell <jason@kapiticoastairport.co.nz>
Sent: Thursday, 13 August 2015 12:18 p.m.
To: Dianne Parker
Cc: Robert Binney; Paula Moore
Subject: 2016 Manawatu Airspace Review

Hi Dianne

Sorry this email comes to you a bit late as I have been away overseas and still playing catch up since my return.

A few days before I left, Kapiti Coast Airport held its latest Safety and Security User Group meeting on Monday 27 July. The matter of the 2016 Manawatu Airspace Review was tabled at the meeting.

The subject was discussed at length, and it was agreed at the meeting that the group as a whole would not be making any submissions on this review. It is understood that certain users from the group will be making or have made their own individual submissions directly.

Considering the timeline of the review process and date of the VNC update, it is worth pointing out, for consideration in the airspace review, that the Wellington Gliding Club have terminated their lease with Kapiti Coast Airport Holdings Ltd and will be transferring their operations to the Wairarapa at the end of this coming summer. The last day they will operate from Kapiti Coast Airport is 30 June 2016.

It is currently planned from 1 July 2016, gliding operations will be prohibited at Kapiti Coast Airport without prior approval by airport management – the exception being for gliders landing in emergency situations.

With this in mind, and from some other observations, it is my personal view that the B680 Paraparamu MBZ should be reviewed for any potential changes to its design and layout, with consideration for all aircraft users (in particular local operators such as the Kapiti Aero Club) and input from Airways NZ via its Aerodrome Flight Information Service.

As this really effects airspace outside of the immediate vicinity of the airport, Kapiti Coast Airport Holdings Ltd as the airport operator has no individual submission this time around either.

I am available to participate on any consultation on this subject, and I encourage those undertaking this review to meet with the Kapiti Coast Airport Safety and Security User Group as part of the consultation process. All local operators including Air Nelson and the AFIS attend this bi-monthly meeting and it is a valuable forum for understanding information and activities in this lower end of the Manawatu Airspace.

If you want to discuss any of this further please don't hesitate to contact me directly.

Best regards

Jason



Jason Russell

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Kapiti Coast Airport Holdings Ltd

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7 August 2015

Group Executive Officer
Aviation Infrastructure and Personnel
Civil Aviation Authority of New Zealand
PO Box 3555
Wellington 6140

(by e-mail to: dianne.parker@caa.govt.nz)

Submission to 2016 Manawatu Airspace Review

Introduction

The Kapiti Districts Aero Club operates from the Paraparaumu airfield (NZPP) and is an extensive user of the airspace depicted on Visual Navigation Chart C2 which is being reviewed. Our club operates Part 91 and Part 141 training within the B680 Paraparaumu MBZ and Tararua CFZ. In addition cross-country flights are regularly flown within the Manawatu CFZ and our club is a regular stop-off and refuelling point for aircraft transiting the Cook Strait region.

We would like the following points to be taken into account during the 2016 Manawatu Airspace Review and ask that we have the opportunity to comment on all planned changes.

Retention of B680 Paraparaumu MBZ Transponder Mandatory Lower Limit

Submission: The lower limit of the transponder mandatory area within the B680 MBZ remains at 1500'.

Justification: As Performance Based Navigation (PBN) procedures are progressively introduced throughout New Zealand the prevalence of transponder mandatory areas is likely to increase. When reviewing the B680 MBZ consideration should be given to:

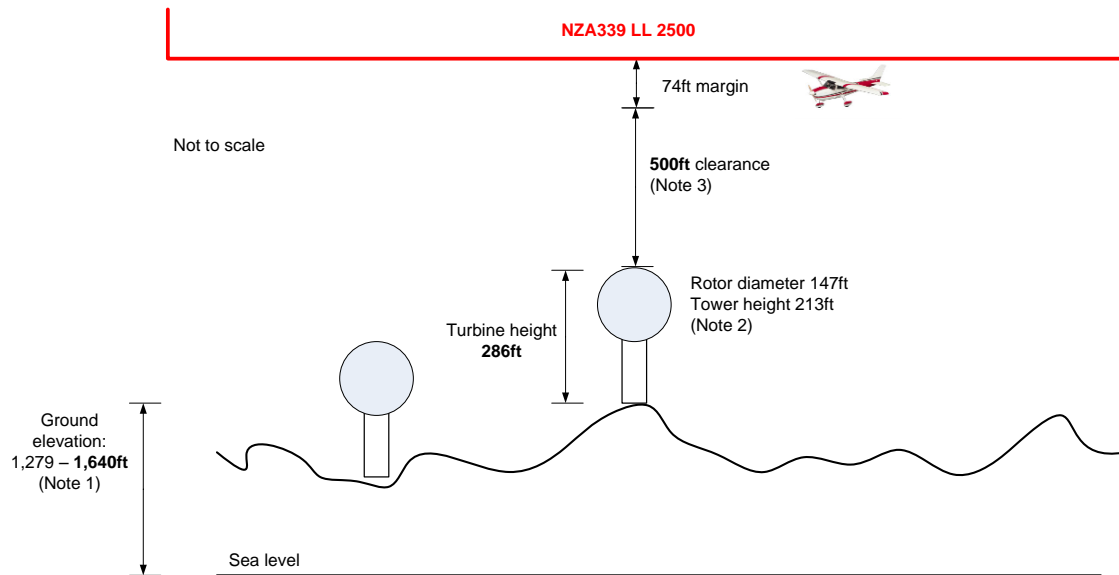
- Paraparaumu Flight Service operates during the hours of scheduled commercial flights and is responsible for providing pilots with traffic information. TCAS is a valuable aid but is not the only source of traffic information.
- The Kapiti Coast is a common transit point and refuelling stop for aircraft that are crossing the Cook Strait and which may not be transponder equipped.
- If the B680 MBZ is made transponder mandatory from sea level, aircraft not carrying a transponder would either have to fly up to 10nm to the west of the Kapiti Coast or over the ranges to the east to avoid the MBZ. Neither are as safe for single-engine light aircraft as transiting along the coast between Kapiti Island and Paraparaumu airfield.

In consideration of the above we believe there is insufficient justification to lower the existing 1500' boundary of the transponder mandatory area of the B680 MBZ.

NZA339 Lower Limit

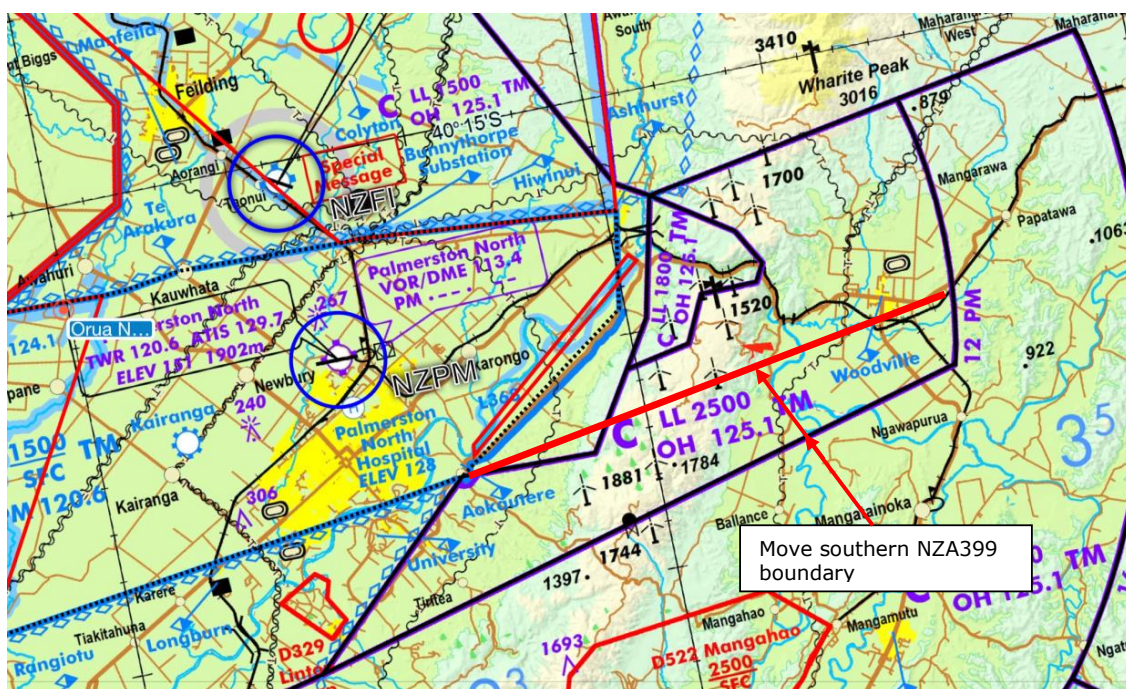
Submission: Reduce the size of CTA-C NZA339 east of Palmerston North and above the Tararua Wind Farm.

Justification: The area to the south of the Manawatu Gorge is a common transit area for aircraft crossing between the Manawatu and Hawkes Bay / Wairarapa. VFR aircraft are constrained laterally to a 6nm area north of the radar dome and south of the Manawatu Gorge and vertically by the 500' clearance above the wind turbines and lower boundary of NZA339. As depicted in the following diagram if the controlled airspace is to be avoided and CAR 91.311(a)(2)(ii) is adhered to an area 6nm x 74ft must be navigated that is outside the Manawatu CFZ, is frequently turbulent and with a reasonable chance opposing traffic may be encountered.



- Note 1: Ground elevation: <http://globalenergyobservatory.org/geoid/42716>
- Note 2: Turbine dimensions: <http://www.windenergy.org.nz/tararua-wind-farm>
- Note 3: CAR 91.311(a)(2)(ii): A pilot ... must not operate the aircraft under VFR ... at a height less than 500 feet above any obstacle ...

With the introduction of Controlled VFR transit fees by Airways, VFR pilots are reluctant to enter controlled airspace. In the spirit of reducing the prevalence of controlled airspace (which we understand to be an Airways objective), we recommend the southern boundary of NZA399 is moved north so that it runs approximately from the Aokautere to the Woodville VFR reporting points as shown below. This would avoid unintentional infringements of the lower boundary of NZA339 and will provide a greater margin of vertical safety as aircraft crossing the Tararua Wind Farm can fly at a height of up to 3500' outside of controlled airspace and well to the south of the Palmerston North 07/25 extended centreline.



Consideration should also be given to extending the existing Manawatu Common Frequency Zone from the point east of Mangaore, over the Tararua wind farm to Woodville and west to Ashurst. This will remove any confusion over which frequency pilot's should be using as they cross this frequently used area.

T354 Oroua Transit Lane Western Boundary

Submission: That the western edge of the existing T354 Oroua Transit Lane be moved westward so that it runs from the existing NW corner of T354 (SW of Awahuriri) to the intersection of State Highway 1 and Ohakea M311 and south along the highway to Himatangi.

Justification: The T354 Oroua Transit Lane is used by VFR aircraft transiting from the Kapiti / Horowhenua area to Fielding or onward to central North Island destinations. Southbound traffic from Fielding or points north is frequently encountered within T354. The western edge of the T354 Oroua Transit Lane is not marked by any easily identifiable geographic features. To avoid infringing Ohakea's CTR_D airspace VFR pilots tend to track just west of the eastern boundary which is easily identified by a tributary of the Manawatu River irrespective of which direction they're travelling in. This tends to bunch aircraft on the eastern side of T354 and reduces lateral aircraft separation in an area that is already narrow and which has limited scope for vertical separation.

State Highway 1 is an easily identifiable feature as is the road from Rongotea that intersects with the highway. To mitigate the risk of a mid-air collision the western boundary of T354 should be easily identifiable so that southbound VFR traffic can track accurately through the lane and are well separated from northbound traffic tracking adjacent to the east boundary.

Fielding CFZ North Western Boundary

Submission: That the North Western Boundary of the Fielding CFZ be moved from the current point at Halcome to Marton and the boundary extended further north to the Marton Reservoir.

Justification: The current radio frequencies when tracking northwest from Fielding along a well-used transit path, particularly in the GA area below 1,500', is confusing. Travelling north position reports are transmitted on 124.1 and then a change to 129.8 is required whilst midway through a busy transit area. Extending the

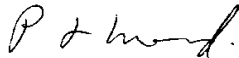
4 of 4

CFZ north and west will help ensure all transiting traffic is operating on the same frequency (whether travelling north or south) until well clear of busy and complex airspace. This will enhance safety and situational awareness as well as contribute towards CAA's objective to simplify, de-clutter and clarify Manawatu's airspace.

L369, Waikawa Beach Low Flying Zone Dimensions

The Kapiti Districts Aero Club is the controlling authority for the existing L369 Low Flying Area. We are currently in negotiations with the property owners in this area with the objective of expanding the L369 area. When those negotiations are complete we will advise Airways accordingly.

Yours sincerely



Peter Merwood
Secretary

Manawatu Users Meeting

9th July 2015

Minutes

Present:

Bill Penman (ACNZ)	Bob Monds (Rural Air)
Paul Kearney (MSY)	Ross Monson (MSY)
Glen Pleasants (PNAL)	Apurva Bhatia (FTM)
Lance Burns (Rescue Helo)	
Steve Pedersen (EAGLE)	

Apologies:

Rex Brereton (ACNZ)	Don Waters (CAA)
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Meeting opened 1730

Matters Arising:

2 stages of runway resurfacing complete

The national RTF improvement program has seen marked changes in RTF discipline

Agenda

PNAL

The Airport Company are reviewing the airport peripheries for tree growth etc. that may affect the side and approach clearances and subsequent approach minimas.

The resurfacing of Taxiway Hotel has been put on hold until the present and potential future operators have been consulted on their possible use of Taxiway Hotel if it was to be widened first. If this were to go ahead it will require both Taxiway Hotel and Delta be closed for a period.

In the interim new Holding point markings will go ahead to indicate Holding short of the Apron and the Fuel pump taxiway.

There will be some resurfacing of the apron area around gate 9.

The AIP will be amended in due course to realign the manoeuvring line in the vicinity of the Massey apron.

Origin Air will begin operations to and from Nelson in early August.

Discussions are ongoing with Jetstar as to their possible operations through Palmy

Airfreight Convairs will be replaced with B734's by May 2016

The grass runway is quite wet at the moment and along with some drainage issues alongside taxiway Brave the grass may remain closed to fixed wing operations for a while.

AIRWAYS

Airways advised Massey that a number of their pilots are not reassigning their call sign ID into the mode S transponder prior to getting airborne and this can create confusion for ATC.

Sept 7th the VORDME will be withdrawn for up to 3 weeks due to a replacement program. The present VOR SIDS will not be available to use. New SIDS will be published in the August AIP supplement that will utilise a radar departure off runway 25 only and SIDS off both runways that track onto the OHVOR. (Left turn only off RWY 07).

The airfreight Convairs are unable to do RNAV approaches so if necessary will be doing an approach at OH then transiting across to Palmy when visual. This has the potential to conflict with departures so all operators outside ATC hours of watch should exercise caution. Massey advised they will curb night flying over this period to avoid any conflicts.

CAA

No Rep Present

Airspace review submissions are required by early August for The Waikato, Bay of Plenty and Manawatu regions.

Discussions took place that was unanimous by all in agreeing that the following should be considered in the Manawatu review;

- Raising the lower limit of the OH CTA areas that are 1500ft to at least 1600ft. This will allow 500ft Sep from circuit traffic for overhead re-joins and transiting traffic at both PM and FI.
- Realigning the PMCTR boundary such that Ashhurst is wholly in uncontrolled airspace. Presently Ashhurst is half in and half out of CTA. It is impossible to visualise the current boundary on the VNC and subsequently there are a number of airspace infringements south of Ashhurst. This will also give more room for transits to and from the Gorge.
- Increase the size of the FI CFZ to include the gorge area through to Woodville. This is a high transit area and there are presently a number of frequency options being used unsatisfactorily so.
- Wanganui will probably have an increase in VFR operations in the near future and IFR aircraft will require more use of the RNAV29 approach. The MOA to the NW of OH requires to be reduced in size to facilitate this approach.
- Establishing a CFZ around the WU MBZ to facilitate Situational awareness for all

All users encouraged to submit changes/concerns

RNZAF

No rep present

Airways advised that the Texans may carry out Buzz and Break arrivals throughout controlled aerodromes in the future.

USERS MOU

Paul Kearney asked all to review the MOU and pass any issues to him.

General Business

Bill Penman advised that he is stepping down as Chief Controller as he considers his retirement plans. He will remain on as an Air Traffic Controller in the interim. Steve Taylor has been appointed in his place.

The meeting closed at 1835

Bill Penman
Chief Controller
Airways
PMTWR

2016 Manawatu Airspace Review

Massey University School of Aviation submission

As per the CAA 2015-2018 Airspace Review Plan document Massey University School of Aviation wishes to propose changes to the current airspace structure in the Manawatu area. All of the proposed changes are in the interest of aviation safety, and in particular, focus on increasing the safety margin of VFR operations outside of controlled airspace, and between IFR / VFR aircraft operating at unattended aerodromes.

Many of the proposed changes adhere to the concepts agreed upon during the Radio frequency use outside controlled airspace industry representative group meeting held by the CAA 15th October 2013. The meeting was the result of 4 years of work from Massey University to establish a National CFZ network. Please consider all past documents, correspondence and justification associated with the National CFZ network proposal as part of this submission to the 2016 Manawatu Airspace Review (copies of these documents can be supplied if requested).

Proposed Changes:

1. NZA335 OH CTA lower limit to be raised from 1500 feet AMSL to at least 1600 feet AMSL. This change will allow safe separation in the Fielding Aerodrome circuit, in particular allow for 500 feet separation between overhead joining traffic and circuit traffic. The current circuit altitude at fielding is 886 feet AGL, with joining traffic separated by only 400 feet.
2. Increase the size, upper limit and name of NZC376 (Feilding CFZ). This larger area (see figure 1) will ensure that VFR traffic confined between military airspace to the west and terrain to the east have a safe area for aircraft to aircraft communication. The current size of the CFZ does not allow traffic transiting north or south sufficient space to allow for the busy VFR training areas, or allow for traffic transiting to or from Wanganui Aerodrome. The upper limit of this CFZ should be raised from 1500 feet AMSL to the lower limit of controlled airspace. Re-naming the CFZ will allow for "Feilding Traffic" to relate only to the traffic operating in the vicinity of Feilding Aerodrome, and not the entire area. Extending the CFZ to encompass the Manawatu Gorge area will be essential to increasing safety for VFR transiting through the tight corridor.
3. Reduce size of M310 and M312 to allow for IFR operations at Wanganui to be contained outside of military airspace and also allow a safer transiting area for VFR traffic tracking to or from Wanganui (see figure 2). Reducing the western boundary (arc) of M310 / M312 to the vicinity of the Turakina River will allow for the NUPLI hold and RNAV 29 approach to be contained entirely outside of the military airspace. Reducing the eastern boundary north of Marton by 1.0 NM will allow for VFR traffic to track via the high tension power lines without

infringing military airspace. The current VFR advisory route specifies 1000 feet at the northern end which is below 500 feet AGL. The proposed change of the eastern boundary will allow VFR traffic tracking north to fly on one side of the power lines, and traffic tracking south on the other.

- 4. Establish CFZ at Wanganui (see figure 3) to ensure arriving and departing IFR traffic has adequate time / space to coordinate with VFR traffic in the area. Currently the DUDED hold on the RNAV 11 approach extends into the Taranaki CFZ. The Taranaki CFZ should be reduced and the new CFZ / MBZ extended to the vicinity of Waiinu Beach.

Maps:

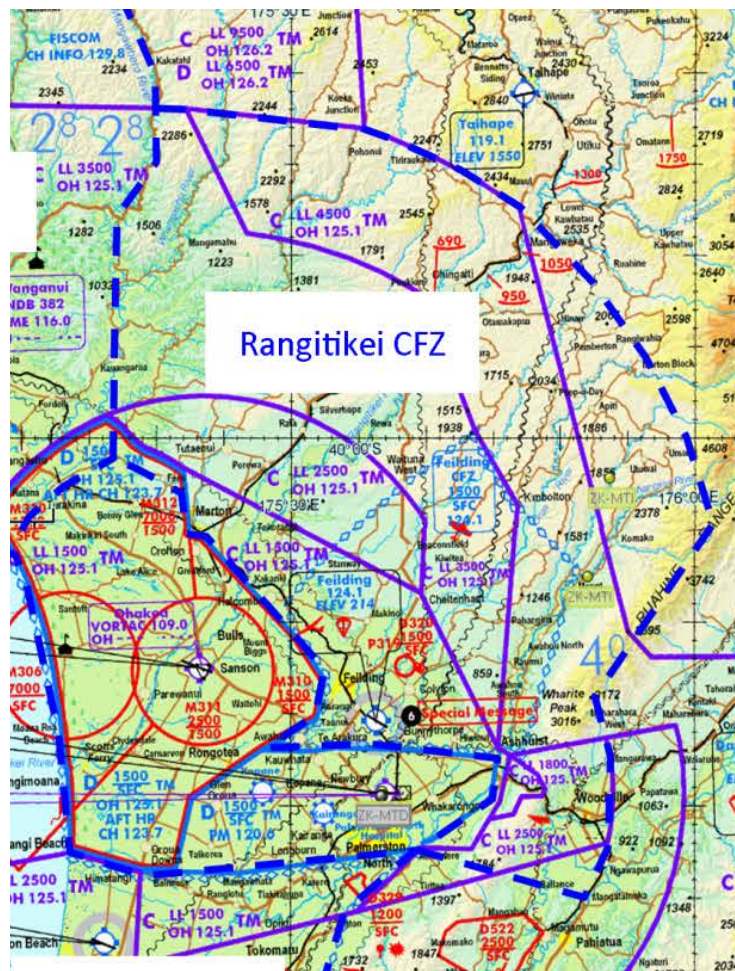


Figure 1 – Rangitikei CFZ



Figure 2 – Reduction of M310 / M312



Figure 3 – River CFZ (Wanganui area)

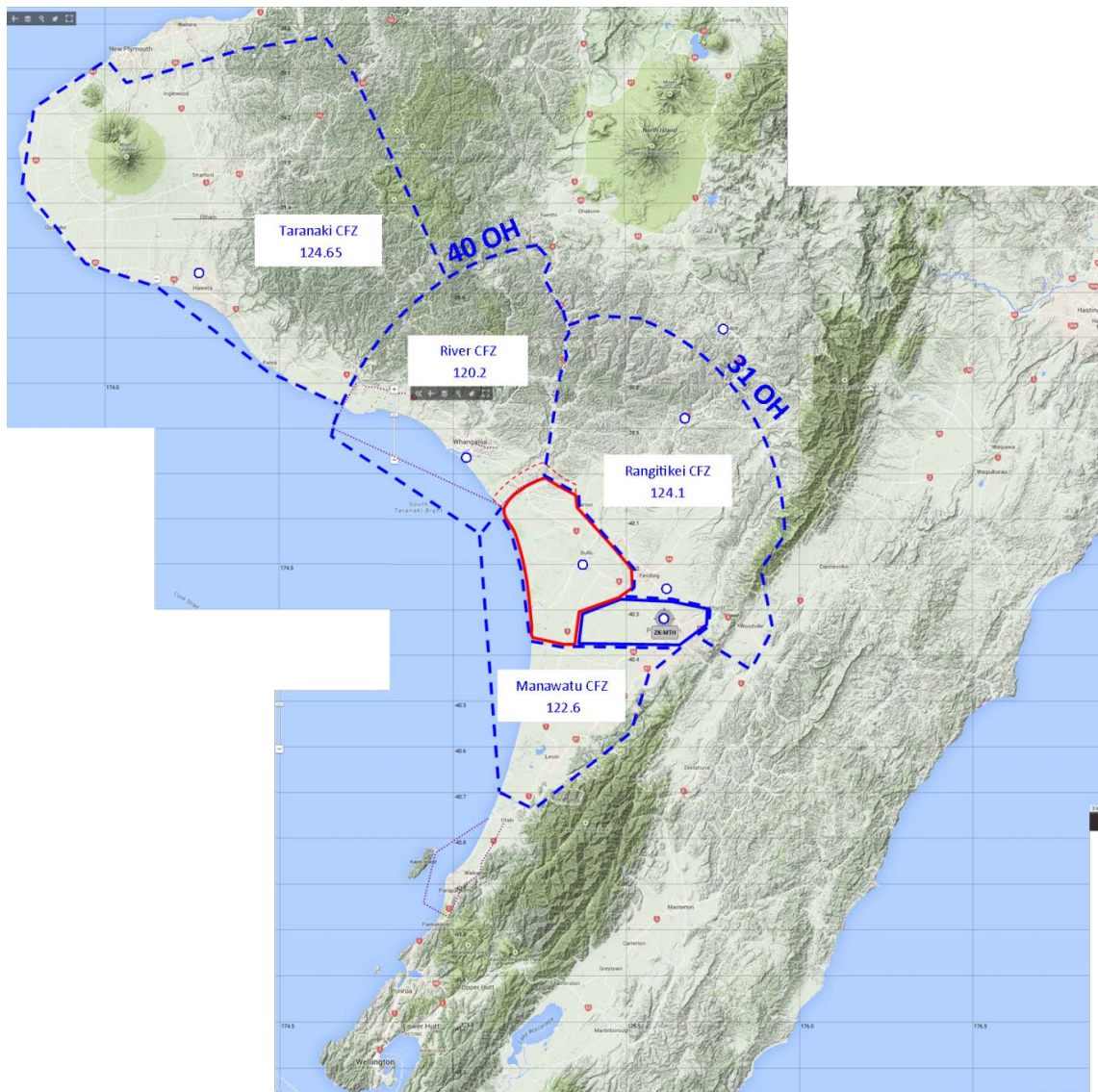


Figure 4 – Manawatu Area CFZ areas (geographical)

Otaki Airstrip Ltd
c/- 96 Oriel Avenue
Tawa
Wellington 5028
18 July 2015
maxscvw@xtra.co.nz

Group Executive Officer
2016 Manawatu Airspace Review
Aviation Infrastructure and Personnel
Civil Aviation Authority of New Zealand
PO Box 3555
Wellington 6140

Dear Sir

2016 MANAWATU AIRSPACE REVIEW

Otaki Airstrip Limited owns and operates NZOT Otaki Airstrip. We welcome the opportunity to take part in consultation concerning the Review.

The following aspects of airspace management in the Otaki area are of concern to us;

1. NZOT is located in the Tararua CFZ and is used by light and microlight aircraft, gliders and autogyros. For obvious geographical reasons it is a convenient stopping point when travelling to or from the South Island. Such aircraft often are not equipped with transponders and in some cases with radios.

Accordingly we consider that any change to Manawatu airspace which results in NZOT falling within MBZ or TM airspace to be undesirable and especially for NORDO aircraft, to militate against flight safety.

2. NZOT seems to be used frequently as a waypoint by aircraft flying at low level (below 4500 ft) to or from Wellington or the South island. In particular, helicopters are frequently seen to fly over the airfield, at or just above circuit height, in either north or south directions.

It would therefore be useful to have charts and related documents annotated to advise pilots to be on a good lookout when operating near or overhead NZOT.

Further, Otaki Airstrip Limited supports the submissions being made on the Review by Kapiti Aero Club and Sport Aircraft Association (Wellington) Inc.

Yours sincerely



(Max Saunders)
Secretary
Otaki Airstrip Limited

1. The lower limit of 1500ft for the OHCTA is not conducive in allowing sufficient and safe separation from circuit traffic when conducting an overhead rejoin at both Feilding and Palmerston North aerodromes. The present circuit altitudes are 1100ft - Feilding's having been recently lowered to match that of PM as a result of a mid-air collision – which allows only 400ft rather than the standard 500ft separation. Raising the lower limit of the OHTMA in all areas to 1600ft would keep a safer standard. It is not envisaged this limit would have an affect on the instrument approach into OH.
2. The airspace around Ashhurst is not clearly defined on the VNC due to various boundary overlays and clutter. There has been a number of airspace incursions into the PMCTR with aircraft transiting this area due to the misbelief that the Ashhurst township is entirely outside CTA when in fact the boundary goes midway through Ashhurst. This boundary also tends to push aircraft into a very narrow corridor around Ashhurst when transiting to and from the gorge area. Realigning the PMCTR boundary to the south of the township would alleviate the airspace incursions, be clearer on the charts and give a bit more room for uncontrolled transits. It is not envisaged this would impact on the RWY25 instrument approaches as the altitude limits/steps will be sufficiently high in clearing this area.
3. The airspace around the Manawatu Gorge is a high density transit area for aircraft. There have been a number of 'close calls' between aircraft as a result of the vagaries and various options of what frequency aircraft utilise. Expanding the Feilding CFZ to include this area from Aokautere through to Woodville and back just south of Whariti Peak would ensure a lot safer environment for all.
4. MOAs – Now that the RNZAF CT4 aircraft have been replaced with the Texan it would be timely to review the NW MOA, namely AREA Foxtrot. This area has limited IFR aircraft being able to fly the WU RWY 29 approach. I understand that WU may in the near future experience an increase in local VFR training operations. IFR aircraft presently tend to do circling approaches and this will not be conducive in safe circuit integration for all operators. Reducing the size of area Foxtrot to at least East of the Turakina river valley should have minimal impact on RNZAF operations.
5. M306 -does this area need to be of the present radius? Reducing the size would make safer options for transiting seawards of the coast and keeping aircraft within gliding distance of land.
6. WU MBZ – this area works fine for circuit operations but again there are vagaries as to what frequency aircraft should be on when transiting around the MBZ. By establishing a CFZ around the WU area that maybe butt up with the FI and Taranaki CFZs and would be a safe advantage for all.

!

1. Agree with the CAA proposal to reduce the size of CTRs to safely contain the circuit vicinity and IFR arrival and departure fans only. There is no reason to have CTR expanded to contain various VFR training areas and other operations. These should be outside controlled airspace and contained within CFZs to allow pilot to pilot communication when considered necessary. This will reduce the amount of Radio clutter and allow ATC to do their job much

more effectively and thus safer.

2. There are still a number of aircraft that do not have transponders and the reduction of CTA will be most beneficial for transits around such.

" # \$

1. Do L464 and L263 need to be inside the CTR. It would work well enough if they were outside CTA and inside a CFZ? This would allow the CTR to be reduced in width but still contain the IFR approach and departure fans
2. CFZs are required on both sides of the HN CTR to ensure the safe operation of the large numbers of aircraft domiciled an HN and those transiting the area. At present it is not clear what frequency aircraft should be operating on in these area. FISCOM is not an option as it limits pilot to pilot interaction when required.

\$%#\$

1. The TGCTR is far too large and with various areas such as the Matakana sector and the area south of Papamoa Beach being utilised for VFR training operations creates unnecessary RTF clutter. It is often difficult to get RTF time when the controller is continually passing mutual traffic information to aircraft in these areas. If these areas were class G airspace and encapsulated in a CFZ it would ease ATC involvement. This would then be common with other CTR operations throughout the country
2. Reducing the size of the CTR to the south of the city would allow a lot more uncontrolled transits. CTA here does not seem necessary as it is well outside the approach and departure fans for IFR aircraft.
3. Why does the CTR need to be up to 2500ft. If the CTR was limited to 1500ft then the CTA could be stepped out on top to contain IFR operations allowing more uncontrolled airspace.
4. The Peninsula CFZ could be extended down to the TGCTR boundary.
5. Does L261 need to be inside the CTR?
6. Could a transit lane be established west of Omokoroa underneath the RWY 07 approach?

FTHQ 3045/1
07 August 2015

Paula Moore
Civil Aviation Authority
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55 Featherston Street
WELLINGTON

RNZAF SUBMISSION TO MANAWATU AIRSPACE REVIEW

- a. FTHQ 2045/1 letter dated 23 May 2014 (attached)
1. The following is a submission by the RNZAF to the CAA consultation process for the 2016 Manawatu Airspace Review. Little has changed since the initial advice to CAA regarding airspace requirements per Ref. However, some clarification of our airspace requirements can now be provided given the experience gained following the introduction to service of the Texan, and retirement of the Airtrainer and Iroquois fleets.
2. The letter at Ref also quite deliberately avoided relating airspace requirements with any extant airspace. It was generic in nature as to the type and dimension of airspace required. It is now possible for us to relate airspace requirements with some of the extant airspace surrounding Ohakea.
3. The RNZAF is still in the process of developing new training airspace and procedures, particularly for the Texan, in co-operation with Airways Corporation. The majority of the training areas under development will fall inside extant controlled airspace. It is not expected that these areas will be finalised until later in 2015, and following that some modifications are inevitable as experience is gained in their use. Until then the RNZAF is unable to comment on any potential changes to CTA boundaries or attendant MOAs.
4. By way of background, it is likely that the training areas can be grouped into four distinct types:
 - a. Coastal Low Flying Area, as extant, 0-1500 ft.
 - b. Low-level VFR-IFR training areas, 2-6,000 ft, primarily used by helicopters, roughly co-incident with the current M312 and locally promulgated instrument training areas around Wanganui
 - c. Medium-level training areas, 8,000 – 15,000 ft, primarily used by Texan aircraft. These are likely to be within 5-15 nm Ohakea, entirely contained within the CTA.
 - d. Upper training areas; M302, M507, and two new areas under development north and north-east of Ohakea.
5. Any training area that has some element outside controlled airspace will result in the RNZAF requesting promulgation by way of a MOA.

Ohakea CTR (M 310 / M311)

6. The RNZAF is aware of the CAA's requirement to reduce the size of the CTR to that required to contain solely aerodrome operations and instrument approach procedures. It is however important to note that the RNZAF's circuit requirements do differ from typical civil requirements, and will likely necessitate a larger than normal CTR. In particular the following activities take place on a daily basis:
 - a. **Buzz and Break procedures.** There is a requirement for the CTR to encompass sufficient airspace to allow manoeuvring at high speeds (up to 250 KIAS) to an Initials point 4nm from the runway threshold – some 6 DME Ohakea depending on the runway in use.
 - b. **Kingair Asymmetric Training.** The asymmetric profile for the Kingair, particularly following a simulated EFATO, requires an upwind track up to 4 nm.

2

- c. **Emergency Landing Pattern (ELP) procedures.** The minimum commencement altitude for the Texan ELP is 3,000 ft AGL (3200 ft AMSL at Ohakea). The preferred RNZAF solution is to raise the upper limit of M311 to 3500 ft to encompass the ELP pattern within the MOA.

7. The current CTR extension to the northwest of Ohakea, co-incident with the boundary of M310, is acknowledged as being outside the normal requirement for a CTR. This area was an essential part of the Airtrainer operating area "Foxtrot". The RNZAF is also cognisant of the impact that extension has on civil VFR operations transiting below 1500 ft between Wanganui and Feilding. It is likely that the RNZAF will be in a position to release some of the airspace below 1500 ft. However we will not be in a position to confirm that until the training airspace CTA sub-divisions are finalised.

Coastal Low Flying Area (M310)

8. The RNZAF will continue to make extensive use of the Coastal Low Flying Area (CLFA) west of Ohakea. The CLFA is currently contained entirely within the OH CTR / M310. Given the likely reduction in size of the OH CTR / M310 it may be necessary to promulgate a new MOA that contains the CLFA. There is no scope for any reduction in size of the CLFA.
9. If a new MOA is promulgated then the RNZAF requirement would be that it is contiguous with OH CTR / M310 – i.e. it will be possible to transit to/from the CLFA while remaining within controlled or protected airspace.

Coastal Training Areas (M312)

10. M312 was promulgated to protect VFR and IFR training areas used by Airtrainer and Iroquois aircraft. When new training areas for the Texan and NH090/A109 are developed, it is probable that the boundaries of M312 can be changed to reflect the new areas.

M302 (Area GOLF)

11. M302 is used as the primary Kingair training area. There are no plans to change it's usage or general dimensions. The RNZAF preference is that it remains extant in the future. Any procedures developed for transit to/from M302 (SIDs or STARs) will be required to be contained within controlled airspace.

M306 (Raumai)

12. M306 continues to be used as a weapons and demolition range, and is gazetted as such. There are no plans to change it's usage or general dimensions. The procedures put in place to allow civil traffic to transit M306 seawards of the coast appear to be working satisfactorily. They have certainly reduced ATC workload in reducing radio calls by aircraft wishing to transit down the coast.

M507

13. M507 is used as a Texan training area. There are no plans to change it's usage or general dimensions. The RNZAF preference is that it remains extant in the future. Any procedures developed for transit to/from M507 (SIDs or STARs) will be required to be contained within controlled airspace.

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Instrument Approach procedures

14. The demise of the Iroquois and Airtrainer has resulted in the removal of two training approaches at Ohakea. The remaining approaches are ILS/DME for the main RWY 09/27, VOR/DME approaches for all four runways, an RNAV approach for RWY 27, and a training RNAV D approach. The eventual intent is that there will be an RNAV approach to each runway. With the promulgation of an RNAV 15 approach it is likely that the RNAV D approach will be removed. Any new airspace will be required to contain each of these approach (and missed approach) procedures.

Conclusion

15. The RNZAF's airspace requirement has not significantly changed from that previously indicated to CAA. The RNZAF expects some change to M310 but notes that military circuit requirements will likely require a larger CTR than the civil norm. A solution is also required to the issue of Texan ELPs with a commencement altitude of 3200 ft overhead Ohakea.
16. The development of new training areas, particularly the low-level (helicopter) and medium-level (Texan) areas is ongoing. The new helicopter areas will likely result in a change to the boundaries of M312. The Texan areas will likely be entirely contained within the airspace already required to protect Ohakea instrument approach procedures.
17. The upper training areas M302 and M507 are likely to remain extant. Any new upper areas not contained within controlled airspace will result in a request by the RNZAF for MOA promulgation.
18. CAA will be advised once new training areas have been developed and trialled, and the impact on controlled airspace and/or MOAs is established. Until then the RNZAF is happy to work with CAA in progressing the airspace review.

C. ANDREW

Wing Commander
Commanding Officer Flying Training Wing

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4



ROYAL NEW ZEALAND AIR FORCE
Te Hokowhītu o Kahurangi

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10081 CAP/4/7/02
FTHQ 3045/1

23 May 2014

Paula Moore
Level 15
55 Featherston Street
WELLINGTON

Dear Paula

Attached are the RNZAF Airspace User Requirements for the Manawatu region to aid in your airspace review. These requirements are forecast for the full operational capability of the A109 and NH90 helicopters, the B200 King Airs, and the T-6C Texan; once the CT-4E fleet cease flying in Jan 15.

Only recently have started conducting deeper development and analysis of the Ohakea airspace and, in particular, how we will introduce the T-6C into the aerodrome circuit environment. This analysis now gives us the confidence in our user requirements and we can formally submit them to CAA as part of your airspace review.

If there are any questions then please do not hesitate to contact me.

Regards,

A handwritten signature in black ink, appearing to read 'R.J. Beaton'.

R.J. Beaton
Commanding Officer Flying Training

Tel: (06) 351 5402
Fax: (06) 351 5607
Email: Richard.Beaton@nzdf.mil.nz

RNZAF Airspace Requirements in the Manawatu

- RNZAF operations at Ohakea by the end of 2015 will include:
 - Helicopters (A109 and NH90 (Iroquois)) – 13 aircraft
 - B200 King Air – 4 aircraft
 - Texan – 11 aircraft
 - Historic Flight (Harvard and Tiger Moth) no specific airspace requirement
 - Regular (daily) itinerant movements by other NZDF and visiting forces aircraft
 - Infrequent use by civil (e.g. Project Alternate)
- RNZAF training operations concentrated in the periods
 - 0900-1700 Mon-Fri
 - ECT – 2300 Mon-Thu (including NVG helos)
- RNZAF aircraft ops characterised by high-intensity training, regular changes from IFR to VFR and vice-versa, formation, aerobatics, low flying and emergency training
- Requirement for all military-specific training to be contained within protected airspace, either CTA/CTR or MOA
- Regularly exceed 250KIAS at low level in Texan
- RNZAF well used to concept of dynamic airspace management – insufficient airspace exists to allow single use.
- Also continual integration with civil traffic flow, which is increasingly taking priority over and interfering with RNZAF operations, even within current MOAs
- RNZAF is not against concept of protected airspace being disestablished when not required, to allow other uses
- But, requires a robust process to ensure activation when it is required

GENERIC REQUIREMENTS

Circuit

- Protected airspace out to min 5nm radius OH.
- Contains all circuit, rejoin (including Buzz and Break and PFL)
- Allows upwind asymmetric exercises
- Up to min 2500ft AMSL for normal ops
- Up to min 5000ft AMSL for low-level aerobatic displays and practise
- VFR and SVFR operations

Instrument Approaches

- Contained for all current and future Ohakea approaches (incl ILS, VOR, RNAV)
- Little or no delay for any duty instrument approaches (conflict with PMWU)

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Weapons

- Area suitable for Air to Ground firing and demolitions
- Within 10nm Ohakea
- Currently use M306 – Gazetted and unlikely to change

Low Flying Training Area

- Used by all Ohakea types and itinerant (Hercules / Orion) plus overseas
- Minimum 10nm x 4nm to contain turning radii
- Surface – min 1500ft AMSL
- Up to 4 aircraft simultaneously
- VFR / SVFR
- Often used for night NVG operations

Helicopter Training Areas

- Extensive use of Low Flying Area
- In addition need general handling and IFR training area(s)
- Min 1500-5000ft AMSL
- Up to 3 aircraft simultaneously
- Min 5nm x 5nm per aircraft
- Within 10 nm OH
- Exclusive use, particularly for NVG ops

King Air Training Area

- General handling and instrument flying training
- 1500 – 9000ft AMSL
- Up to 3 aircraft simultaneously
- Min 20nm x 20nm per aircraft
- Within 50nm Ohakea
- Will also be used on occasion by Texan and itinerant aircraft

Texan Training Areas

- Area 1 VFR/SVFR/IFR Upper level (including aerobatics and spinning)
- 10,000 – 20,000ft AMSL
- Up to 6 aircraft simultaneously
- Min 10nm x 10nm per aircraft
- As close to OH as practical – not more than 25nm Ohakea
- Area 2 VFR/SVFR Medium Level (aerobatics, limited general handling)
- 5,000 – 15,000ft AMSL
- Up to 4 aircraft simultaneously
- Min 5nm x 5nm per aircraft
- Within gliding range of Ohakea (1nm / 1,000ft)



SPORT AIRCRAFT ASSOCIATION
NZ Inc.
www.saa.org.nz

06 August 2015

Group Executive Officer
Aviation Infrastructure and Personnel
Civil Aviation Authority of New Zealand
PO Box 3555
Wellington 6140

(Email: dianne.parker@caa.govt.nz)

Reference – 2016 Manawatu Airspace Review

This submission on the **2016 Manawatu Airspace Review** is being made by the **Sport Aircraft Association of New Zealand Inc. (SAANZ)** on behalf of the members of the SAANZ organisation.

This submission is being made in support of the submissions made by the following organisations:

- **Kapiti Districts Aero Club**
- **Otaki Airstrip Ltd (NZOT)**
- **Sport Aircraft Association (Wellington)**

The SAANZ recognises that the above organisations are extensive users of the airspace depicted on the **Visual Navigation Chart C2** which is the subject of this review. We fully support any recommendations made by these organisations and readily defer to their local knowledge and experience. We would request that the submissions presented by these organisations be given all due regard and consideration.

The following points and their relevant supporting arguments provided by the respective organisations in their submissions to CAA are acknowledged in this submission:

Kapiti Districts Aero Club

- **Submission 1:** That the area of CTA-C NZA339 east of Palmerston North and above the Tararua Wind Farm is reduced in size or the 2500' lower boundary is raised.
- **Submission 2:** That the lower limit of the transponder mandatory (TM) area within the B680 MBZ remain at 1500'.
- **Submission 3:** That the Western edge of the existing T354 Oroua Transit Lane be moved westward so that it runs from the existing NW corner of T354 (SW of Awahuri) to the intersection of State Highway 1 and Ohakea M311 and south along the State Highway 1 to Himatangi.

Otaki Airstrip Ltd (NZOT)

- **Submission 1:** That the NZOT airspace continue to remain within the Tararua CFZ and outside any MBZ and TM airspace to enable NORDO aircraft and non-transponder equipped aircraft to continue to transit this area safely.
- **Submission 2:** That the Visual Navigation Chart C2 be annotated to advise pilots to maintain a good lookout for other aircraft when operating near or overhead NZOT.

Sport Aircraft Association (Wellington)

- **Submission 1:** That the lower limit of the transponder mandatory (TM) area within the B680 MBZ remain at 1500'.



SPORT AIRCRAFT ASSOCIATION
www.saa.org.nz
NZ Inc.

We concur with all the submissions tendered by the above organisations but would also like to add our opposition to any proposal for the lowering of the B680 MBZ to surface level. We fully agree that the lowering of this MBZ would create an unnecessary flight hazard to NORDO or non-transponder equipped aircraft that wish to transit this zone. Such aircraft would be forced to track around the MBZ far out to sea to avoid the airspace which would be neither safe nor practical for some of these aircraft. A number of aircraft belonging to SAANZ members are not transponder equipped due to space and weight considerations and regularly transit this zone. These aircraft and their owners would be put at increased risk if they were forced to fly out beyond Kapiti Island to transit around this area on their way to or from the South Island.

We would also point out that one of the stated commitments of CAA for the New Zealand airspace review was to maintain sufficient non-controlled airspace to enable VFR aircraft to transit the length and breadth of New Zealand without having to enter or use controlled airspace. This non-controlled airspace has become increasingly important to our members given the introduction of Controlled VFR transit fees by Airways. The introduction of these fees has resulted in many VFR pilots being reluctant to enter controlled airspace and as such maintaining this particular area along the Kapiti Coast as non-TM is extremely important.

In conclusion we would request that the CAA take fully into consideration the submissions presented by the Kapiti Districts Aero Club, Otaki Airstrip Ltd (NZOT) and the Sport Aircraft Association (Wellington) when reviewing the Manawatu Airspace.

A handwritten signature in black ink, appearing to read 'Bill Sisley', is written in a cursive style.

Bill Sisley
President
Sport Aircraft Association NZ Inc.
Mobile: 027 303 3131
Phone: 07 549 1855
Email: bill.sue@orcon.net.nz

Dianne Parker

From: maxscvw@gmail.com on behalf of Max Saunders <maxscvw@xtra.co.nz>
Sent: Friday, 7 August 2015 11:25 a.m.
To: Dianne Parker
Subject: 2016 Manawatu Airspace Review

Hello Dianne

Sport Aircraft Association (Wellington) Inc represents a group of sport aircraft builders, pilots and owners in the Wellington region. It owns a hangar at Kapiti Coast Airport which currently houses 9 aircraft.

SAA(Wn) supports the submissions being made to you by Sport Aircraft Association NZ Inc. (our parent body) ,Kapiti Aero Club and Otaki Airstrip Ltd.

In particular SAA (Wn) asks that a clear and safe north-south airspace route be retained in the Paraparaumu area , clear of MBZ and TMA airspace,for use by NORDO and non-transponder equipped sport aircraft.

Likewise, we ask that NZOT airspace be kept outside MBZ and TMA areas in order to allow for ready access by NORDO and non-transponder aircraft, especially in bad weather or low fuel situations.

Regards

Max Saunders
Safety Officer
Sport Aircraft Association(Wellington) Inc.

Group Executive Officer
Aviation Infrastructure and Personnel
Civil Aviation Authority of New Zealand
PO Box 3555
WELLINGTON 6140

Email: dianne.parker@caa.govt.nz

REFERENCE – 2016 MANAWATU AIRSPACE REVIEW

- APPLICANT:** Wanganui Airport – Client No. AD29693
- DESIGNATION:** Additional amendment to Wanganui Mandatory Broadcast Zone (MBZ) B374. See Reference A
- REFERENCES:**
- A. Wanganui Airport letter dated 17 October 2014 and accompanying proposed amendment to MBZ
 - B. Massey School of Aviation proposal for local Common Frequency Zones circa 7 August 2015.

INTRODUCTION:

1. Reference A proposed an increase to the Wanganui Mandatory Broadcast Zone to:
 - Increase the distance of the zone boundary to the north to improve broadcasting of positions prior to joining to land at Wanganui, and
 - overcome the anomaly of having a non-designated zone between the upper limit of the MBZ and the lower limit of the Ohakea Control Zone (55), and
 - better delineate the MBZ by using easily identifiable landmarks, and
 - enhance air safety in the vicinity of Wanganui Airport and surrounding area.
2. Reference B proposes the introduction of Common Frequency Zones (CFZs) within the Manawatu, Rangitikei, Wanganui and Taranaki areas to promote better in-flight communications between aircraft operating in these progressively congested regions and reduce the potential for mid-air collisions.

DISCUSSION:

3. MBZ.

3.1 Boundaries. While the principles submitted under Reference A remains extant further consideration suggests other improvements are possible given the proposals suggested at Reference B and a more recent understanding that amendments to the existing Ohakea Control Zone Boundaries are likely in the immediate future.

3.2 The current eastern boundary, and that also proposed by Reference A, leaves a small (approximately 2nm) gap between the MBZ and the Ohakea Control Zone through which aircraft can pass without communicating to either Ohakea Air Traffic, aircraft completing the RNAV approach to Runway 29 at Wanganui or aircraft in vicinity of the Wanganui traffic pattern and eastern MBZ boundary. This is considered undesirable and potentially a concern to flight safety. Extending the currently boundary of the Wanganui MBZ to that of the Ohakea Control Zone, or any new boundary of that zone, would correct this potential hazard.

3.3 Transponder Mandatory. Current regulations determine the area between 1500' and 2500' within the MBZ to be Transponder Mandatory (TM). The reason behind this restricted height band within the MBZ is uncertain, however, as the requirement for transponders becomes more widespread, along with an accompanying use and reliance on TCAS for traffic alerts and collision avoidance, so to will the potential for near misses or collisions with

aircraft not transponder equipped, rise. It is acknowledged that the use of TCAS technology does not alleviate pilots from the responsibility for maintaining an active lookout when visual conditions permit; however, the reality is that as the number of transponder equipped aircraft increases so to will be the expectation of encountering non-transponder aircraft decrease. Pilots of aircraft equipped with transponders are therefore more likely to use the technology available to them to acquire a visual sighting on what they know to be present rather than maintaining a proper lookout for that which is not expected. Evidence abounds within aviation where the reliance upon technology, irrespective of the circumstances and the logic of basic airmanship and procedures, has lead to tragic consequences. The use of selected TM within the MBZ has the potential to follow the same path. Further, the progressive introduction of the larger Q300 services to Wanganui suggests an additional level of safety within the MBZ is now appropriate. A mandatory requirement for transponders throughout the MBZ would be an appropriate response to this need.

3.4 Transiting Aircraft As discussed at Reference A, light aircraft transiting north or south through this region use either the coastal route or the existing undesignated zone separating the Wanganui MBZ and Ohakea Control Zone. For those undertaking the former both Waiinu Beach and Whangaehu River Mouth provides readily identifiable landmarks with the direct track between the two clearing the Wanganui airport by some two nautical miles. However, many pilots prefer to track closer to the coast rather than remain exposed to a possible ditching in the event of an engine failure. This in turn brings transiting aircraft into conflict with aircraft within the Wanganui traffic pattern. Alternatively aircraft transiting direct between these two locations, but in opposing directions, are, if using GPS, likely to be on a direct collision course by virtue of the accuracy of this system. A less than desirable, but increasingly credible, situation. Geographic circumstances offer little practical resolution to the issue. The incorporation of standard transit zones or height restrictions for transiting aircraft presupposes they can be observed irrespective of local weather conditions or any other factors influencing the flight at that particular time. Given the wide variety of coastal factors that influence Wanganui Airport this is unlikely. The routing of transiting aircraft through the MBZ is therefore best left to the pilot at the time, but with the requirement and responsibility to remain safely clear of other aircraft either joining, or established in, the Wanganui traffic pattern or undertaking an instrument approach to either of the main runways.

PROPOSAL

4. It is proposed that:
 - a. The eastern boundary of the Wanganui Mandatory Broadcast Zone as proposed at Reference A be further extended to that of the Ohakea Control Zone or any amended boundary thereof, and
 - b. The Wanganui Mandatory Broadcast Zone as determined at 4a above be designated Transponder Mandatory throughout, and
 - c. Aircraft transiting the Wanganui Mandatory Broadcast Zone be required to maintain safe separation from aircraft joining, or in, the Wanganui traffic pattern or aircraft undertaking an instrument approach to Wanganui airport.

CONTACT

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