



National CFZ proposal

You will no doubt have seen or heard of CAA's response to this proposal, instead offering an alternative that appears both costly in terms of ground stations to provide reasonable low-level coverage, as well as impractical in terms of funnelling all comms to a desk or two of overworked FISCOM operators.

RAANZ's view is that regional CFZs provide a more practical solution- local air-to-air position reporting directly between those who need to know; a less formal environment where pilots can pass on local position, traffic, airfield and weather conditions and any other 'need to know' stuff. And if you need the official stuff such as weather, clearances, etc- switch to FISCOM and enjoy a less cluttered environment than at present.

CFZs work well- let's extend them. Simplificate rather than complicate. And at **no cost** to anyone- users, CAA, Airways.

CAA have called for submissions by Friday 24 May. Bill Penman (Ops officer) and Rodger Ward (exec member), both experienced microlight pilots, ATOs and air traffic controllers are preparing the RAANZ submission. You can be assured they will be able to present a well-reasoned and practical view- from the perspectives of both the pilot and the controller.

Ian Sinclair (ex RAANZ president) has also prepared a detailed submission (see below). He is happy for anyone to pinch his ideas and words. We encourage you or your club/user group to make your own submission to CAA.

Draft submission to CAA re CFZs

Ian Sinclair, Temuka

[01] Draft submission that will be forwarded to CAA, shared for discussion and debate. I intend to fine tune this and submit it as a private submission to CAA. I have incorporated ideas from email discussions I have been copied into from AOPA and I am happy for any useful parts of this to be used by AOPA or any one else. I have indexed the comments through out this document to make comments / additions / discussions a little more focused and structured. Eg [01].

[02] Readers should be familiar with the two documents published- Massey Proposal for a National Network of Common Frequency Zones in Class G Airspace, and CAA's Radio frequency use in uncontrolled airspace discussion document including FISCOM attachment. Both documents are available on CAA website , → What's New, 12 Apr 2013 [Radio frequency use in uncontrolled airspace](#) - CAA discussion document related to proposal from Massey University - comments close **24 May 2013**

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Submission to CAA re Common Frequency use for aircraft to aircraft position reporting.

Introduction

[11] I have read the Massey Proposal for a National Network of Common Frequency

Zones in Class G Airspace and CAA's Radio frequency use in uncontrolled airspace discussion document including FISCOM attachment.

[12] I applaud the effort that Massey have made to promote this important safety issue. I have been a personal observer of the chaos of position reporting with in class G airspace and agree with their major philosophical points and objectives.

[13] I understand that CAA's position is somewhat defensive based on the a set of rules that have been superseded by common practice and the needs of the users of the system. CAA need to listen to the users and allow a system to operate that works for users. I do not support the FISOM based plan CAA are promoting. We can do much better.

[14] What ever is decided here we will have to live with for a long time. Lets get it right and create a usable system for pilots to share traffic information.

[15] My perspective is as a GA pilot who frequently travels up and down the country and as an enthusiastic microlight pilot and occasional microlight instructor. I mostly fly with two radios and generally have one on local traffic and the other on FISCOM. This changes close to controlled non class G airspace where I have one radio on local traffic and the other on the non class G airspace. Once inside controlled airspace I fly with one on the published controlled air space frequency and the other on FISCOM / ATIS / Next frequency within controlled or other appropriate selection

[16] At the risk of recovering ground that is included in the Massey document I would like to re emphasise important points to consider. I am passionate that we can come up with a plan for the future that increases safety through enhanced communication and decreases the likely hood of two aircraft operation in the same class G airspace on different radio frequencies.

[17] I would also like to add some comments to the framework suggested by CAA.

In support of a National network of CFZ(s) in Class G airspace.

[21] There is a significant safety hazard to aircraft operating in class G airspace that can be reduced by a national network of published aircraft to aircraft position reporting common frequency's.

[22] The name is not important. The name that is given to the areas could well be CFZ but it could also be Common Traffic Advisory Frequency (CTAF) which is a internationally understood term.

[23] It is more important to have a area based frequency plan than for these areas to comply with any international idea of airspace classification. The areas could be published as best practice framework and supported by airfield frequency changes within each area.

[24] The areas need to be on a published document that describes the national network of areas and is workable in the cockpit. It also needs to find its way onto aviation charts, paper and electronic and GPS databases.

[25] The areas should follow pilot recognisable landmarks and be sized to be workable with respect to traffic volumes and number of frequency changes required. In my opinion educating pilots to use reporting points and using clear, concise and correct RTF procedure will minimise frequency clutter.

[26] Frequencies should be organised, where possible, to change in sensible / logical ways as areas are transitioned. Ie in the existing CFZ's Canterbury and Rangiora areas 119.2 changes to 120.2 but similarly 119.2 → 119.3 → 119.4 (or similar) would be pilot friendly.

[27] Reusing frequencies in geographically separated areas would work especially where class G airspace is capped by controlled airspace. Ie Southland , Cook Straight and Tauranga could easily share, where as the South Island Main Divide where high altitude operations are common would not share well. It may well be possible to have only 15 -20 extra frequency's used with careful reuse. The Massey proposal suggests 41 areas.

[28] All airfields inside an area should use a common frequency and all aircraft in the area should use the same frequency for aircraft to aircraft traffic information.

[29] An area should include all class G airspace from the ground until any upper airspace is reached. There should not be frequency changes with altitude within class G. This is a major part of the existing chaos.

[30] The system must work for all users of class G airspace. ie Scheduled traffic transitioning to/from controlled to class G airspace, local circuit traffic, aircraft in transit, aircraft operating in the general local area, aircraft operating off non published airfields in the area, agricultural operations in the area.

[31] The system must work for pilots who use airways service and for those that do not. Filing a flight plan or using separate flight following is an individual operators choice and is greatly influenced by the type of operation and the choice of non Airways service being used.

[32] The system must work for all pilot groups, professional, recreational, training. It must be simple enough to explain to someone in two minutes and with the aid of a map, or device, pilots would be able to easily select the correct area frequency for traffic information.

[33] Areas that surround airfields should use the same frequency as the airfield to at least 10 miles and to the upper controlled airspace.

[34] Transitions between traffic areas could be aided by increasing the number of published VFR reporting points around boundary areas that have high traffic volumes.

[35] Areas that touch the ocean should be extended out to sea to include any areas between the land points that are transited point to point.

[36] Areas that surround airfield MBZ's like eg Timaru and Wanganui should be on the same frequency out to at least, but not restricted to, 10 miles. Preferably they would be part of a larger CFZ rather than becoming awkward isolated islands.

[37] Creating traffic areas will decrease the amount of circuit traffic transmissions that overlap currently on 119.1 to only those airfield contained within the traffic area. This will be a great improvement and reduce potential circuit traffic information confusion, especially where geographically separated airports have the same runway designation and pilots use poor radio procedure with respect to the airfield name.

[38] There is no need for an enhanced FISCOM coverage as these proposed areas are for aircraft to aircraft, not aircraft to ground.

[39] We would never expect aircraft to operate within controlled airspace on different frequencies and to make frequency changes with altitude, terminal areas excepted, so why is this not a reasonable proposition for aircraft operation in class G airspace.

[40] In my experience the task of changing to the correct published traffic frequency, as occurs in many parts of our airspace now, is not onerous and the payback would be increased focus to understand traffic calls heard because they are in the area you are operating in.

[41] The real life system we have now has developed over a long time in an ad hoc way. This is our chance to improve and be leaders in safe traffic information practice in class G airspace.

[42] Proper Aircraft to Aircraft traffic information should be shared blindly, at regular intervals, and on demand in response to aircraft entering the area and to resolve conflicts or concerns. Having defined CFZ areas already causes this behaviour and having a national plan will only enhance this.

Comments on CAA's Discussion Document

Section 2

[61] States that "In uncontrolled airspace pilots are responsible for their own separation and collision avoidance". Accepting this statement and recognising that there is a difference between the legacy rules and promoted best practice by CAA, and current practice by pilots operating in class G who have tended to do what ever they can to comply with the

separate and avoid principal. Does CAA not have a responsibility to listen to the pilots and make a system that suits class G users and protects the pilots and their passengers?

[62] FISCOM use for aircraft to aircraft reporting is not currently being used in common practice, so lets stop talking about it as if it is. FISCOM is useful for gaining information and updating flight expectations with Airways services. I listen to FISCOM 95% of the time I fly and they provide a top class service. Aircraft to aircraft and aircraft to FISCOM are two separate things, and should remain separate. The radio calls currently heard on FISCOM are of little use to pilots operating in class G airspace for traffic separation purposes.

Section 6

In response to the “Key issues that CAA identified from the paper are”. There are 7 paragraphs

[63] 1/ Does not matter, CFZ's exist now so why is a rule change required?

[64] 2/ Use the name CTAF if this is important.

[65] 3/ This would be a great use of available frequencies. Even sticking with the 180 channel model we could make this work.

[66] 4/ Using logical frequency schemes, where possible, would reduce this work load. I think pilots would cope well and will appreciate the certainty of knowing other aircraft in the area are on the same frequency.

[67] 5/ Strongly disagree. To accept this implies pilots do not understand current charts.

[68] 6/ Worth spending this time and money for the long term safety outcome. This is a one off cost to change. The benefits will last for ever.

[69] 7/ Alerting service is not required on a Traffic to Traffic frequency. This is for a monitored frequency, ELT or 121.5 transmission. FISCOM is still available for information sharing.

Section 7

[70] Promoting a system (FISCOM) on the basis “pilots should currently be using” is not a valid proposition. It does not address the main point of concern. Aircraft to Aircraft traffic information for

all aircraft in class G airspace in the same area.

[71] Appendix A could be redraw as a single block of airspace using a single frequency.

[72] No improvement of FISCOM coverage is needed to improve Aircraft to Aircraft traffic information.

[73] Establishing area frequencies does not remove the ability for pilots to use FISCOM for information sharing and Airways services. Aircraft with dual comms or multiple frequency scanning ability can and do currently monitor FISCOM as well as local traffic,so promoting common

frequency areas is not a reduction of options or functionality of current FISCOM services.

[74] With reference to the FISCOM coverage chart there are large areas of the country that are not defined, even considering there may be no practical coverage at 4000 ft, or perhaps no coverage, The FISCOM needs to be defined for the system CAA promotes to work.

Section 8

[75] The discussed option of lowering the ceiling of the unattended airfield ceiling is illogical and introduce even more hazard. Consider parachute operations, helicopter auto rotation practice, engine failure practice, gliding activity, all operations that may be conducted above 2000 AGL at or close to an unattended airfield.

[76] The height above uncontrolled airfields if common frequency should be increased to the upper airspace, not reduced.

Wake Turbulence

Bill Penman/Ops Officer

I have some concerns that there are some out there that may not be taking the presence of wake turbulence seriously. If caught out entering wake turbulence, especially during the take-off phase, the results can be most unsavoury, even ending up with nowhere to go but upside down on the runway.

All microlights, including gyrocopters are at the pinnacle of the spectrum that are the most vulnerable due to their light weight and often limited power potential. Don't get complacent because you might think you have 100 plus HP that will get you out of most situations. I have known aircraft with 300HP that have bit the dust on take-off with no altitude for recovery, when caught out by wake turbulence.

All aircraft produce wake turbulence, more correctly called wingtip or wake vortices. Simply put, the difference in pressure over the wing causes the air to move outwards under the wing towards the wingtip and curl up and over the upper surface starting a wake vortex. The same pressure differential also causes air to move inwards over the wing. This mix of outward and inward moving streams of air form trailing edge vortices, which move outwards to join the wingtip vortex adding to the intensity.

The initial intensity of the wake vortices is determined by weight, speed, configuration, wingspan and angle of attack of the aircraft. Wake vortices spread laterally away from aircraft and descend approximately 500 to 900feet at distances of up to 5 miles behind it. These vortices tend to descend at approx. 300 to 500feet per minute during the first 30 seconds. For an aircraft that is taking off the point at which vortices are at their worst is at the point of rotate.

Small aircraft positioning behind larger aircraft in a circuit should be very wary of its wake. If the aircraft is flown between the vortices there is a very real possibility of high roll and sink rates that could lead to loss of control for those less experienced. Give yourself plenty of room.

ATC will provide wake turbulence separation between yourselves and aircraft that are taking off when 7000kg or heavier (the likes of Dash 8s ATRs and Beech 1900s plus). Due to the lateral displacement of wake turbulence it will be applied within 760m of the aircraft concerned. That is a big distance and can often be outside the boundaries of an airfield. If taking off from the same point as the heavier aircraft 2 minutes will be allowed. If taking off from an inset point it will be 3 minutes as you will be closer to the point at which the aircraft rotates.

You may wave these separation requirements but before you do consider the consequences if your judgement is flawed. In light wind conditions the vortices can linger a lot longer. Separation will not be applied if taking off behind the likes of a light twin but consider your aircraft may still be affected.

It is your decision.

- Don't get complacent.
- Be wary.
- Be safe.

(CAA have produced a GAP booklet on Wake Turbulence that is a must read).

Membership changes

Wayne Lindebaum	Bay of Plenty Microlight Assn	Advanced National	Upgrade
Peter Walsh	Hawkes Bay Microlight Club	Advanced National	IA
Timothy Graham	Canterbury Recreational Aircraft Club	Advanced National	Joined
Michael Fairburn	Wairarapa Ruahine Aero Club	Novice	Joined
Steven Duncan	Canterbury Recreational Aircraft Club	Advanced Local	Upgrade
Peter Upton	Kaitaia Aero Club	Advanced National	Joined
Rhona Calverley	Bay of Islands Aero Club	Senior Flight Instructor	Upgrade
David Wynne	Bay of Islands Aero Club	Novice	Exam
Cherie Sowman	Hawkes Bay and East Coast Aero Club	Novice	FRT0
Craig Nelson	Wairarapa Ruahine Aero Club	Novice	Joined
Gavin Morley	Hawkes Bay and East Coast Aero Club	Novice	Joined
Peter Wilson	Gyrate Flying Club	Novice	Joined
Gareth Parker	Wairarapa Ruahine Aero Club	Intermediate	Joined
Chris Rossiter	Canterbury Recreational Aircraft Club	Novice	Joined
Dion Buchanan	Wairarapa Ruahine Aero Club	Senior Flight Instructor	Joined
Wayne Eaton	Nelson Microlight Club	Novice	Joined
John Faulkner	Bay of Islands Aero Club	Senior Flight Instructor	Joined
Mark Siemelink	Canterbury Recreational Aircraft Club	Novice	Joined