



NZHGPA Airspace Officers Annual Report Aug 2013 to Aug 2019

The introduction in 2013 of a five year role out programme for the complete redesign of New Zealand's airspace through Performance Based Navigation (PBN) under the CAA's Southern Skies programme and the explosion of RPAS/Drone technology that resulted in CAA releasing new rules for the flying of unmanned aircraft in August 2015, has created nothing short of what was to become a perfect storm for New Zealand's Airspace.

I am proud to have steered the NZHGPA through this challenging and demanding time, strongly advocating for all our members from hang gliding, paragliding to paramotoring, to promote and protect the airspace we fly in. With two grandchildren on the way, I will be standing down at the end of August and so this report is in three parts, firstly a summary of the past six years in the Airspace Officer role, followed by the past year and finally threats and opportunities to airspace;

Summary - 2013 to 2019; The NZHGPA made 49 airspace related submissions to various authorities effecting HG/PG/PPG operations ranging from applications, objections or on policy change. The CAA Aeronautical Services approved the following;

- 8 x GAA's - 5 x New GAA's & 4 x GAA's Extended by boundary or increased height.
- 1 x GAA disestablished to uncontrolled airspace.
- 7 x CTA Boundary Changes - Extended by boundary or increased height.
- 2 x CTR Boundary Reductions.
- 2 x Transit lanes in CTR.
- 2 x Operational MOU to allow continued operations.
- 1 x Danger Area amendment protecting an existing launch site.
- 1 x MBZ Height raised, bringing back into play previously lost HG/PG sites.
- 3 x MBZ Extensions prevented that would have affected multiple launch sites/flight paths.
- 1 x MBZ proposed application by regional air user group prevented from submitting.
- HG Symbols onto VNC Charts – Dozens across NZ.
- CAA Policy on Transponders below 1500 ft; Lobbying resulted in a statement by CAA that Transponder Mandatory airspace to remain above 1500 ft in TM MBZ's.
- CAA Policy on RPAS/Drones Rule 101 – submission Agreed that Part 149 Certificate holders (as per Part 61 pilot license holders) demonstrate enough airspace knowledge to hold any future pilot qualification issued by a model aircraft association as per CAR 101.205(a)(3). Effective 1 Aug 2015.
- 2 x RPAS large 847sq km and 500 sq km Restricted Areas challenged with one withdrawn and the other put on hold – To date no commercial operator has successfully been designated an RPAS Restricted Airspace.
- Competition AIP notifications – Numerous accepted over the past six years.
- Other agencies/regional councils on airport/airspace policy x 1.



Summary of airspace matters during this reporting period Aug 2018 to Aug 2019

1. RPAS/DRONES

RPAS/Drone Meeting with CAA – In September 2018 I called a meeting along with our CEO and key CAA staff in Wellington, to raise concerns over the increasing RPAS/Drone applications for extensive RPAS Restricted Airspace, namely by Incredible Skies Hokianga 847 Sq Km and Skybase at Alexander 500 sq km. Also discussed following a mid-air collision with a drone and paraglider the safety of our members sharing the same 400 ft drone airspace that also our pilots fly in. Since this meeting there has been a second mid-air drone v paraglider collision, both are being investigated by CAA.

Outcome from NZHGPA/CAA meeting:

- An assurance that there will not be an explosion of applications for large scale RPAS Restricted Areas, this was followed by a public statement from the CAA CEO Graham Harris.
- CAA to do better in publishing future pamphlets depicting that HG/PG are classed as aircraft to avoid and if spotted drone operators to land their drone immediately.
- CAA included HG/PG in the RPAS/Drone Video Fly the Right Way. The video is now showing on all Air New Zealand aircraft, in four languages.
- Airshare – RPAS/Drone Website to show all HG/PG launch/landing sites. Extensive mapping work has been done and submitted to Airways for publication, we hope to have something in the near future up on the Airshare web site with a 4km warning radius similar to that of airports/airfields.

Hokianga RPAS Restricted Area - The NZHGPA and NHGPC made four submissions (two each), followed by a lively airspace user consultation meeting against the Incredible Skies proposal for a 847 Sq Km of unrestricted airspace being turned into Restricted Airspace that would effect many HG/PG Sites.

Outcome - Application put on hold.

Alexandra RPAS Restricted Area – The NZHGPA and SHGPC, plus individuals made submission which then followed a lively airspace user meeting against the Skybase proposal for 500 Sq Km of unrestricted airspace being turned into Restricted Airspace effecting HG/PG XC routes.

Outcome - Application withdrawn.

The major hurdle to these RPAS Restricted Airspace applications, is the ability to safely fly Beyond Visual Line of Sight BVLOS, which is more akin to aircraft Instrument Flight Rules IFR, for which the NZHGPA continues to challenge the rules for such flights. Furthermore, the Public Consultation process only consults with airspace users and not the effected public as a whole, for whom we keep getting told by the authorities it is in the public interest, yet the public are not consulted with. One day BVLOS technology will come of age as we are recently seeing in the USA and Australia where the first BVLOS licences have recently been issued. Once BVLOS systems are accepted by CAA as safe in NZ, then in theory there should be no need for these large RPAS Restricted Areas for trialing experimental technology and we will find ourselves sharing the skies with RPAS/Drones that have the ability to See and Avoid HG/PG.

RPAS/Drones Update

As I write my report the government has just released it's white paper *Taking Flight: an aviation system for the automated age*, setting out the Government's vision for how drones can be better integrated into the current transport system to develop a thriving, innovative and safe sector white paper. HG/PG do not have representation in that paper, the NZHGPA needs to be involved in this consultation at Government level (above that of CAA), as the next challenge will be how the airspace is carved up into corridors to allow what will likely be akin to Performance Based Navigation (PBN) for RPAS/Drones flying GPS/Cellular Coverage on specific air flight corridors under BVLOS. HG/PG are the only other aircraft sharing the same airspace below 500 ft with the recreational RPAS/Drone operations at 400 ft and I envisage in the future that from 500 ft to 3000 ft will be commercial operations. It concerns me enough that I have already suggested to the NZHGPA that we need another airspace officer to become an RPAS expert and focus on lobbying in this area.

2. NZHGPA Airspace Submissions pending for Nov 2019/2020

- **Auckland Transit Lanes** - The NZHGPA and AHGPC made submissions to object and also increase inland boundaries and or the height of proposed alterations to Transit Lanes T156 Te Henga (Muriwai Beach/golf course/Piha area) and T157 Whangaparaoa (Browns Bay), which are major and extensive lengths of coastline on both the west and east coastline of Auckland. Pending and awaiting airspace user consultation for implementation Nov 2020.
- **VNC Chart HG Symbols - Hang** gliding activity symbols will be added to Nov 2019 VNCs to advise other aircraft of hang gliding and paragliding activity at the following launch sites:

<u>Location</u>	<u>VNC</u>
Clifford Bay Yealands	VNC C7
Clifford Bay Cape Campbell	VNC C7

- **Hawkes Bay** – The NZHGPA were fortunate enough to be in on the ground at the drafting stage of the proposed overdue Hawkes Bay PBN Redesign. The NZHGPA made three submissions/counter submissions with the majority of the proposals accepted by the design team at Airways, with the airspace design resembling the new revolutionary hexagonal design similar to that achieved in Nelson. The agreed Airways design is yet to go out through CAA to airspace consultation, but if agreed it will see the Northern end of Te Mata Peak opened up to 4500 ft plus various other benefits in heights near launch site at Burma Road and XC Flights heading west and importantly south. There will during the CAA consultation still be the requirement for various 3 x MOU's to be worked through. Implementation is now for Nov 2020. Initial submissions made back in 2016.
- **Gisbourne** – Will need to apply for MOU Exiting Paramotoring area GAA NZG452 Ormond 1000 ft Permanently Active During the Day, to fly west of the Waipaoa river from the Lake Repongaere and following the Waipaoa River down towards the coastline.

CAA and Airways do not see Hawkes Bay redesign effecting current paramotoring GAA G452.

- **Motu Airstrip Gisborne** - The NZHGPA made a submission for a boundary change from 6500 ft AMSL to 7500 ft AMSL or alternatively a GAA at Motu Airstrip.
- **Nelson GAA Rainbow/Molesworth Ongoing** - A GAA between inland Kaikora, St Arnaud Lakes to Hamner Springs was considered too complex to work through in the Nelson 2018 review due to being underneath the Christchurch to Nelson flightpaths especially for the air ambulance . A smaller and less desirable GAA was presented by Airways but the NZHGPA/THGPC felt that it was not really usable. Along with Nelson Lakes Gliding Club I have continued to lobby to keep this on the table for possible Nov 2020 implementation, along with the end of the amended Beeby's Range.
- **Hamilton CTR /CTA affecting Mt Pironga** - The Auckland HG/PG Club and the NZHGPA made a submission objecting to the proposed PBN approach change to the Hamilton CTA South Western boundary around Mt Pironga and also the boundaries to the North as this would impact on the Huntley GAA G272 gained by the NZHGPA in Nov 2014. Due to numerous objections and limited time, the CAA decided it was not possible to fully consider the options in this vicinity to assist with flexible use of the airspace for 2016 Nov implementation. Airways were then to work through PBN procedures South West of Hamilton in 2017 - Still pending a decision.

5. Other Airspace Matters across the Regions

There has been a marked increase this year in airspace matters from clubs or individuals. The following is a list of work scoped out or advised on outside of the normal CAA's five year airspace review plan:

1. **Auckland** – Advised on West Auckland Airport Company application applying at Paraki for Airport Status. This is concerning and has the potential for a sleepy aerodrome at Paraki to be turned into a regional overspill for domestic flights to take the strain off Auckland for the more lucrative international flights, just as we are seeing Queenstown airport trying to do with Wanaka airport.

2. **Christchurch** - The NZHGPA and CHGPC made a submission objecting to the construction of a Waterdrome in Lyttleton Harbour from Peninsula Air Limited concerned on the effect of HG/PG flights on Taylors Mistake, Arendale and flights across the Lyttleton Harbour, submission were extended out to 6 April 2019. CHGPC is in talks with Peninsular Air Ltd – outcome Pending.
3. **Christchurch** – Advised on opening of G951 Springfield GAA on the Torlesse Range taking airspace from the current 7500 ft to 9500ft VNC 13 Christchurch dated 8 Nov 2018.
4. **Wanaka** – Low Fly Zone at Tarras - numerous correspondence between NZHGPA/CAA objecting and challenging the need for the Low Fly Zone. SHGPC in talks with the applicant Classic Flights to see if the Low Fly Zone 500 ft AGL or below can be moved away from the mountains of Long Gulley Launch Site and out more into the flats. The concern is that will the existing Low Fly Zone be disestablished or will this create two Low Fly Zones one for Helicopters and one for Fixed wing with Tarras creating a barrier to competition and xc flights.
5. **Rotorua** – Scoped out a plan action for the club to request an MOU to fly from Mt Ngongotaha at Rotarua.
6. **Rotorua** – Scope out Gliding NZ proposal to modify G459 at the Paeroa Range Rotorua
7. **Queenstown** – ATC produced a Review document of current operations within the CTR. A user meeting followed SHGPC President attended, review will not affect HG/PG Ops including existing GAA's. Drafted proposal to club on CFZ boundaries between Queenstown Wanaka for easier use of radios and to avoid any need to revisit MBZ discussion in and around Wanaka as a CFZ is sufficient.
8. **Mt Maunganui** – Scope out MOU for Paramotor Corridor from Tay Street to Mt Manganui.
9. **New Plymouth** – Scoped out works in and around New Plymouth after implementation of VNC Chart effective 9th November 2018.
10. **Nelson** - Attended Airspace consultation ATC and work on Barnicoat MOU, plus working on Marybank MOU for access to landings 200m inside CTA using the Model Aero Club Zone at 400ft active during the day, as an umbrella to fly in under to land.
11. **Marlborough** – Landowner complaint to CAA over low flying at Yealands. Submitted Pilot report (including GPS track logs) and investigation into complaint. Applied for HG symbols over the concerned area and club made amendments to the operational area flying as a goodwill jester and not because any airspace or land infringement had been found to be made.
12. **Wellington** - 2019 Common Frequency Zones Proposal - North Wellington - Consultation
13. **HG/PG National Competitions** - Advised on AIP's, Please remember these must be submitted four months before any major competition start dates, for smaller regional comps consider using NOTAMS.
14. **XContest Mapping** – Currently the PCC has to supply the mapping to XContest. Whilst the South Island is mapped well, the North Island is lacking. We rely heavily since the retirement of Wayne Rhors on Gliding NZ Airspace Files. Use at your own risk as Gliding NZ are only interested in mapping the areas they fly so obviously over major cities and such like will be missing the detail. Due to a big submission around the Waikato region by Gliding NZ for Nov 2020, they are holding off work on the North Island Mapping until then. Gliding NZ have kindly said any mapping for Competitions may be possible with enough advance notice, but we are relying on the goodwill of volunteers. Gliding NZ GPS Files are still the best we have to date.

15. **DOC National Parks** – Challenged CAA over the use of the wording MBZ in a User Groups name giving the perception of authority over airspace, especially for administrative purposes by DOC over landing concessions. No one organisation owns or can control airspace outside of Civil Aviation Rules except in a Restricted Airspace designated by CAA, any inappropriate extension of the use of airspace by airspace users should be highlighted to the CAA for appropriate action.
16. **Educational & Advisory** - Various mediums including Facebook posts with maps, Airborn articles on reporting of Drones.
17. **Attended FAI AGM Meeting** – Christchurch discussed possible world Air Games 2026.
18. **Agencies** - Liaised on common airspace matters with Gliding NZ Clubs/members and others.

Acknowledgement

I would like to acknowledge and thank the following for their help and time in writing or contributing to submissions and attending various airspace meetings during this reporting period;

1. **Ian Millar** - WHGPC Submission Wellington CTR and attending meetings.
2. **Kris Erickson** - WHGPC Procedures with Wellington Airport and attending meetings.
3. **Tim Brown** - SHGPC for RPAS Alexander application, Low Fly Zone Tarras, Queenstown Review. XContest airspace files.
4. **Mark Hardman** - RPAS Alexander application.
5. **Peter Greive** - Extensive Mapping work for Airshare and RPAS Alexander application.
6. **Shaun Gilbert** - HBHGPC Submission and work with Airways airspace redesign.
7. **Ian Millar** - Wellington CFZ.
8. **Ian Manton** - Work with Gliding NZ to modify G459 at the Paeroa Range Rotorua.
9. **Michel Verhagen** – Submission for boundary height change 6500 ft AMSL to 7500 ft AMSL or alternatively a GAA at Motu Airstrip
10. **Josh Benjamin** - THGPC Barnicoat/Marybank MOU's.
11. **Guntram Gross** - Hokianga Harbour Submission x 2 submissions and meetings.
12. **Stefan Sebregts** - Paraki Submission against West Auckland Airport.
13. **Leslie Graham** - Submission Transit Lanes T156 Te Henga (Muriwai Beach/golf course/Piha area) and T157 Whangaparaoa (Browns Bay).
14. **Ross Gallagher** - Scope out Mt Ngongotaha, Rotarua.
15. **Graeme Tingey** - Scope out flying paramotors at Mt.Maunganui.
16. **Luke Goleman** - Lyttleton Waterdrome submission.
17. **Airspace Officers** - Attending various meetings across NZ as NZHGPA Ambassadors.

I apologise if I missed anyone of the list, as I know behind the scenes others this year have also contributed their time and support to their Club Airspace Officers;

Thank You

Looking forward

Airspace Threats:

- Near Term; RPAS/Drone mid-air collisions and near misses increasing, especially below 400 ft by unknowledgeable, untrained and unlicensed recreational drone operators.
- Near Term; RPAS/Drone applications to CAA for large scale Restricted Airspace for trialling new experimental technology for BVLOS (See and Avoid) operations, at the cost of recreational pilots. These applications in NZ are likely to continue until such time BVLOS technology comes of age to detect other aircraft, then RPAS Airspace moves to the next phase of commercial integration into the aviation system.
- Medium term; Airways believe they are close (within 6 months) to getting a transponder smaller than a matchbox to an acceptable standard by CAA for RPAS/Drones BVLOS operational certification. Currently RPAS See and Avoid technology classes HG/PG as being a non-compliant aircraft as undetectable like a bird, except to various experimental sensory equipment. Any aircraft carrying a transponder would for BVLOS operations become a compliant aircraft and therefore detectable to a RPAS/Drone. Transponder cost to mainstream recreational would currently be prohibitive at around \$2000 USD, plus yet to know the battery source and life of such technology, for the transponder to be so small it is likely powered by the RPAS own on board battery source of limited life span, but it will evolve.
- Long term; See and Avoid Technology coming of age to commercial integration in the aviation system and HG/PG having to share or stay out of new style RPAS corridor airspace ranging from 500 ft to 3000 ft AMSL. The concern to HG/PG is such corridors may stipulate that aircraft are to be compliant in order to share such RPAS corridors i.e. transponder mandatory.
- Long Term; Pressure on smaller airports like Wanaka and Paraki being turned into domestic regional overflows to free up international slots at major airports.

Opportunities;

- PBN has allowed for the introduction of new revolutionary airspace design, as seen at Nelson and is now being applied to the Hawkes Bay Region. There is an opportunity to revisit under the CAA's 5 year airspace review cycle to see what can be further tweaked by looking closer at the approach and departure profiles; gone are the days of airspace boundaries having to conform to wide sweeping arcs on a VNC Chart.
- MOU's in CTA's in my time have been established at various locations across NZ and may be applied with Airways permission to gain access to otherwise controlled airspace, especially for low flying in areas like coastlines or just entering inside of a CTA to land.
- On a personal level I encourage you all to consider sitting the online NZHGPA Airband radio rating, this is a great way to open new flying areas, especially for paramotoring and or free flying XC routes through MBZ's.

It has been a pleasure serving the NZHGPA, the journey through the CAA's five year PBN airspace review and new RPAS Rules, has not just been about the successes of the airspace we have gained, but as much about the uncontrolled airspace that has on many occasions been stopped from being lost. I personally thank the literally dozens of volunteers across NZ that I have worked with since 2013, who came forward on behalf of their club to devote their time and services to help promote and protect the airspace for the good of our sport;

"Wishing you all many happy flights and safe landings"

A handwritten signature in blue ink that reads "Nick Taber". The signature is written in a cursive style with a long, sweeping underline.

Nick Taber
NZHGPA Airspace Officer

Dated: 22nd July 2019

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