

Motueka Aerodrome Operations and Safety Committee

Tasman District Council

Date and Time: 1 December 2022 at 10 am

Venue: Motueka Aero Club

Present: Stuart Bean (Chair)
Mark Stagg, Jackie Day, Giles Whitney, Kevin Bedford, Greg Wood, James Meldrum

In Attendance: Nick Chin (Enterprise & Property Manager), Stephen Batt (Senior Enterprise Officer) and Christina Ewing (Enterprise Officer and meeting scribe).

Apologies: Javan Rose, Brad Keay, John Richards

Meeting opened at 10 am

1. Welcome

The Chair welcomed everyone to the meeting.

2. Apologies

Javan Rose, Brad Keay, John Richards

That the apologies be accepted for the Motueka Aerodrome Operations and Safety Meeting.

Moved: Mark Stagg **Seconded:** Giles Whitney

3. Minutes of the last meeting – The 1 September 2022 minutes were confirmed by the Chairperson and Chief Executive under Standing Order 27.4, therefore there are no minutes for confirmation.

It was noted to change Collins Street to College Street and clarify one of the points.

4. Action items from the previous meeting

The action items were updated, and the following items were discussed:

	Action	Status	Assigned to:
1.	A large area of loose stones needs to be returfed by the fuel pump. (Northern side of the pump). (Look at cost to concrete the area, as it's a more suitable and a long-term solution)	Tasman Bay Contracting has been engaged.	Christina Ewing
2.	Diamond Grid Check	Ongoing	Stu Bean
3.	Draft Drag Racing Licence to be circulated at next meeting for discussion ()	NDRA LTO is commercially sensitive information and will not be circulated as discussed in meeting.	Nick Chin
4.	AIP for Motueka to be updated with Taxiways and protocols	Ongoing	Stephen Batt
5.	MOU to be updated with current users and reflect any other necessary changes	Ongoing	Stephen Batt

5. Operations and Safety Issues

Health and Safety

The gyrocopter accident was discussed by the Committee. Mr Batt advised that CAA had been notified of the accident. The emergency response was very efficient by both the Aerodrome Operator and the Emergency Services. It was noted that Emergency Services should be updated to which gate to use for fast access to the aerodrome. Mr Batt continued that the only error he could find was that the gyrocopter had been removed from the crash site before CAA clearance was received. The members thought it would be good to continue having conversations amongst themselves ensuring users understand the emergency processes, and that there was an emergency hotline for accidents. Mr Batt asked how many active gates the aerodrome needed and could some be removed to avoid confusion. Also, Mr Batt has engaged with NAC and to carry out Inspections, these are to be conducted every 4 weeks but only required every 6 weeks.

Bird Culling: Ms. Ewing said that she had discussed bird culling with contractors in regard to the airfield bird population. It was outlined by users that culling was unnecessary because there were significantly fewer birds on the aerodrome as a result of the long grass (Hay area) being mowed. Ms. Ewing requested that the users keep her informed of the situation with the bird population and any potential problems.

The users continued to discuss a couple of small incidents that occurred at the aerodrome. The group agreed to continue the discussion outside of the meeting amongst themselves. Mr Batt noted to members, that Council being the Operator, would like to see users note in their individual Health and Safety Policies that Council would be notified of these events.

The LOS was discussed and how it is interpreted in the Tasman Resource Management Plan (TRMP).

Regarding security cameras, Mr Stagg offered Council if they wished to use his web-based service if they provided the camera.

Motueka Aerodrome Report – The AIMMS report and monitoring was discussed. It was asked if Council could clarify what type (bundle level) of monitoring was purchased by the Enterprise Team. The team would investigate and get back to the Committee.

The Enterprise team met with Carlton Campbell, the CAA Safety Consultant, to discuss marking out the grass runway. Mr. Campbell cautioned against using fuel and paint to outline the grass runway since those places tend to become muddy. A good method to handle that, according to Mr. Campbell, is to outline the grass runway with white pavers. Mr. Batt desired to inform the users of this choice and gather their opinions.

6. General Business

Mr. Batt stated that the Licence to Occupy by the NDRA has been approved for drag racing. The extra rain day granted to the NDRA, and further discussion of the drag racing were also reviewed. Ms. Ewing stated that it was a pragmatic option. Covid had such a detrimental effect on all businesses during the previous two years, and it seemed pointless to have prepared the Aerodrome for the event just to have it cancelled.

When the users asked to view the NDRA's License to Occupy, Mr. Batt explained that as it was commercially sensitive, he did not feel confident giving it to them. He did state that he could provide an overview of some of the terms.

Fuel pump – It was thought rather than returfing the fuel pump area that staff investigate the cost of pouring concrete, this would be a more suitable and long-term solution. Staff would get a quote.

According to preliminary investigations to supply power to the western end of the aerodrome. The electrical work was estimated to cost around \$125,000K, however there will be an additional fee for easements. The runway is in satisfactory condition and may have up to another five years of useful life before resealing is required. It was agreed that the funds set aside now for resealing could be used subject to there being adequate available funds for continued maintenance and resealing of the runway when required.

Goodvibes Parachute Boogie – This is scheduled for ANZAC weekend in 2023 and will cover the 18 -25 April 2023.

The meeting closed at 11:15 am

Next meeting: – 12/07/2023

Action Log – 1 December 2022

Action	Status	Assigned to:
A large area of loose stones needs to be returfed by the fuel pump. (Northern side of the pump).	(Look at cost to concrete the area, as it's a more suitable and a long-term solution)	Christina Ewing
Diamond Grid Check	Ongoing	Stu Bean
Summary of NDRA Licence to Occupy	Ongoing	Stephen Batt
AIP for Motueka to be updated with Taxiways and protocols	Ongoing	Stephen Batt
MOU to be updated with current users and reflect any other necessary changes	Ongoing	Stephen Batt

Managers' Report March 2023

Motueka Aerodrome Operations and Safety Committee

Health and Safety

- 1.1. Nelson Aviation College has reported the presence of a non-communicative unsupervised child on the operational airfield on the 13th of January. Fencing and current procedures to be discussed in terms of this risk.
- 1.2. Contractor Induction – It was noted that BP came onsite without an induction and associated NOTAM. Discussions around future inductions and how to easily operationalize.
 - 1.2.1. Fencing – are current fences, assuming they are maintained correctly, sufficient and appropriate.

Operations

- 1.3. Mowing and maintenance – general discussion over contractor performance
- 1.4. Extension of Hane ground lease – this has been completed and included a fee to grant an additional term.

Risk

- 1.5. OLS concerns and update.
- 1.6. Application of the following rules and implications: Part 157 Notice of Construction, Alteration, Activation, and Deactivation of Aerodromes.
- 1.7. CAA Guidance material for land use at or near aerodromes. Please see attached and for discussion.
- 1.8. Risks – Motueka Aerodrome is subject to a HAIL listing and therefore any soil removed from site requires a Resource Consent. Discussion and ability to retain soil onsite.

New initiatives

- 1.1. Capital works programme. The group discussed last time the ability to use the runway resealing budget to extend electrical services down the western side of the aerodrome. Management is concerned that with changing economic times, it would be not possible to provide that assurance. Discussion should this work continue given the above risk.

Attached

- Part 157 Notice of Construction, Alteration, Activation, and Deactivation of Aerodromes.
- CAA Guidance material for land use at or near aerodromes. Please see attached and for discussion.
- GIS layout for two runways to be passed to surveyor for OLS Survey.

1.0 General

1.1 Motueka Aerodrome

1.1.1 Tasman District Council

Tasman District Council (TDC) is the entity which owns and operates Motueka Aerodrome and TDC is a network utility operator within the definition of that term in Section 166 of the Resource Management Act 1991 and has gazetted approval as a Requiring Authority under this Act.

The Tasman District Council is able to:

- Establish and carry on, maintain or manage the Motueka Aerodrome Activities;
- Improve, add to, alter or reconstruct the Aerodrome or any part thereof;
- Operate and manage the Aerodrome as a commercial undertaking;
- Make Bylaws effective within the Aerodrome boundaries;
- To change and/or set such fees, charges and dues, after consultation with the defined users of the Aerodrome, for the use and operation of the Aerodrome, its services or associated facilities;
- Withdraw permission to operate at Motueka Aerodrome at any time.

1.1.2 Use of Operational Areas

TDC, in accordance with Civil Aviation Rule 91.127 may prescribe limitations and operational conditions on the use of the Motueka Aerodrome. These conditions and limitations will be published in the Aeronautical Information Publication New Zealand (AIPNZ).

1.2 Motueka Aerodrome Memorandum of Understanding

1.2.1 Aim

The aim of the MOU is to promote safe flight activities and a harmonious relationship between aviation activities and the environmental interests of the airport's neighbours.

1.2.2 Purpose

The purpose of this is to maintain high safety standards and to minimise the impact of flying activities on the community and neighbours living in the vicinity of Motueka Aerodrome and the Motueka area as much as possible while enabling the normal airport commercial activities to take place. It has been formulated with the assistance of Motueka flying organisations, the Civil Aviation Authority, Tasman District Council, and representatives of the local community.

1.3 Code of Conduct

Motueka Aerodrome is a busy, unattended aerodrome, which is often underestimated by visiting pilots. Many people flying at Motueka are student pilots who do not hold full pilot licences as they are under training. In such an environment it is inevitable there may be delays, frustration or financial penalties. The contribution of all will assist in achieving maximum safety and efficiency, but requires all parties to exhibit tolerance, a co-operative attitude and the highest standards of airmanship.

Those using Motueka Aerodrome are asked to adhere to the following guidelines:

- Show patience and tolerance towards other operators and pilots;
- Clearly explain intentions and clarify, if requested;

- Be considerate to all other users and local residents by exhibiting a professional attitude and a high level of airmanship;
- Listen out before transmitting;
- Do not direct insults or unkind words to other operators or pilots, at any time;
- Be considerate of local residents and display good airmanship;
- Be familiar with practices, procedures and all other information regarding the use of Motueka in the AIPNZ and comply with these requirements.

1.3.1 *Flying Neighbourly*

"Flying Neighbourly" is a method of operating an aircraft in such a manner that recognises the issues of operating that aircraft in and around noise-sensitive areas. It contains both short and long term strategies, in recognition of the amenity values that almost all councils hold as particularly important community values to be managed. The challenge for aviators who legally operate above noise-sensitive areas at low level (ie not below 500 AGL) or undertake repetitive manoeuvres, such as steep turns or aerobatics, is to plan and manage their operations so that the amenity values of people on the ground are respected. By taking a proactive approach to aircraft operations and by managing both the types of, and repetitive nature of, aircraft noise, in working with the wider community, the aviation community has an opportunity to circumvent the possibility of legislation being forced upon the industry.

Aircraft noise is generated in the low frequency band, where noise annoyance levels are at their highest. To that end, this MOU recognises the amenity values surrounding noise, particularly in noise-sensitive areas, and the signatories to this document undertake (when possible) to plan, manage and mitigate the noise generated by the aircraft that they operate. The way aircraft are operated will influence reactions.

Techniques which will help operators to manage noise likely to increase and contribute to annoyance include:

- *If it is necessary to fly near or over noise-sensitive areas, maintain an altitude as high as possible, in line with the operations required to be flown. Fly normal cruising speed or slower and observe low-noise speed and descent recommendations, avoid sharp manoeuvres, use steep takeoff and descent profiles (helicopters only) and vary the route, since repetition contributes to annoyance.*
- *When operating in noise-sensitive areas, pilots of fixed-wing aircraft should operate their propellers at the low end of the propeller recommended RPM operating range, where appropriate.*
- *When carrying out low level operations pilots shall give consideration to things they can do to manage their noise footprint. Some examples are: operating RPM, repetitive track placement (eg keeping high ground or shelter belts between their tracks and any nearby residence when this is possible) hours of operation and timing of operation.*

The guidance above does not apply where it would conflict with Civil Aviation Regulations, air traffic control clearances or instructions, or where a lower altitude is considered necessary by a pilot to operate safely, or to complete a specific task. Types of operations which are not considered to align with the "Fly Neighbourly" ethos are:

- *Manoeuvres requiring repetitive applications of power over the same geographic location for extended periods*
- *Lengthy aerobatic sessions over the same geographic location*

- *Constant and repetitive flight envelope over the same geographic location for extended periods*
- *Flying at, or directly towards, places of residence or work, at low level.*

The adoption of these recommendations and use of noise abatement provide the basis for lowering the noise generated in day-to-day operations of aircraft in noise sensitive areas, such as Upper Moutere. If the recommendations are followed, public acceptance will be improved and the aviation community will be able to flourish and grow, without being restricted by the burden of new noise regulations and operational restrictions.

Further reading can be found in the NZ Aviation Industry Association Environmental Code of Practice and the Helicopter Association International (HAI) "Fly Neighbourly Guide". (amended 01/07/2014)

1.4 Specific Operational Considerations

Motueka currently has several different types of operation which affects the way it operates. It has a mix of commercial operators and flight training which utilise differing types of helicopters, microlights, hang gliders, parachutes and aeroplanes.

1.4.1 Commercial Activity

This encompasses:

- Parachute operations with the parachute aircraft dropping parachutists to circuit and land on the eastern side of the runway. The parachute aircraft may join from a high downwind, base leg or straight in.
- Commercial aerobatic activity occurs above 3,000ft AGL in the training areas and the aircraft tends to join the circuit in a similar manner to the parachute aircraft.
- Normal charter flying activities.
- Microlight activity occurs off the field with motorised microlights doing scenic flights around the area – particularly in the Abel Tasman area. Hang gliders are regularly towed into the air by motorised microlight which gains height above the airfield and descends steeply overhead or on the non-traffic side after tow release. The hang glider circuits on a very close left hand circuit to land on the western side of the runway. All microlights and hang gliders have radios. Note that some of these aircraft operate in the circuit at slow speeds.
- Commercial helicopters operate from both the aerodrome and from a helipad which is 1.5nm south of the aerodrome on the approach path for runway 02. (amended 21/11/2013)

1.4.2 Training Activity

Motueka aerodrome has high levels of training traffic involving helicopters, microlights and aeroplanes which use both grass and sealed runways, plus both the eastern and western helipads. The normal circuit is at 1000ft AMSL but training helicopters tend to use an 800ft AMSL circuit which is slightly closer in. Helicopters often practice auto-rotations from varying altitudes.

1.4.3 Fixed Wing Aircraft

Where possible, pilots are to observe the following:

- ~~Houses and farm buildings should not be used as reference points for training or other manoeuvres.~~ *Houses and farm buildings must not be deliberately target.*(amended 01/07/2014)

- Keep the flight path away from buildings when simulating forced landings, glide approaches and engine failure after take-off manoeuvres.
- Power settings and flight profiles should be in accordance with the manufacturer's specifications for minimum noise levels consistent with safety.
- Aircraft with noisy characteristics should use full runway length for take-off and reduce to climb power as soon as safety permits.
- ~~Night cross-country flight routes, particularly over Motueka, should be varied and kept seaward of Motueka after 9.00 pm.~~ *Night cross-country flight routes, particularly over Motueka, shall, where possible, be varied and kept seaward of Motueka after 9.00 pm.* (amended 01/07/2014)

1.4.4 Helicopters

Where possible, pilots are to observe the following:

- ~~Houses and farm buildings should not be used as reference points for training or other manoeuvres.~~ *Houses and farm buildings must not be deliberately targeted.* (amended 01/07/2014)
- Power settings and flight profiles should be in accordance with the manufacturer's specifications for minimum noise levels consistent with safety.
- All helicopters should use take-off techniques consistent with safety to achieve 200 feet AMSL prior to crossing the airport boundary.
- Hover training is only permitted in those areas designated for that purpose.
- Sling load training is to be contained within the confines of the Aerodrome boundary or LFZ L664 and in those areas designated for that purpose.
- No night circuit training at Motueka. After night flying in Nelson, helicopters are to carry out a landing to the flood-lit hangar in a way which will minimise noise on return to Motueka. Landings are to be no later than 10.30 pm.

1.5 Complaints

Any public comment or concerns should be reported to the Tasman District Council who will direct relevant issues to the Motueka Aerodrome Operations and Safety Committee. Due investigation will ensue. Any infringements of Civil Aviation Rules must be referred to the Civil Aviation Authority for appropriate action in accordance with Civil Aviation Rule Part 12.

1.6 Public Relations

In the event of an accident/incident at Motueka Aerodrome, all media requests for information or comment should be referred to the affected organisation, the Aerodrome Operator or the CAA, without further comment.

2.0 Operations

The following airspace applies:

2.1 NZC 687 Motueka CFZ, Nelson Bays

Boundaries are as outlined in the New Zealand Air Navigation Register.

2.2 NZB 682 Motueka MBZ, Nelson Bays

Boundaries are as outlined in the New Zealand Air Navigation Register.

2.3 Noise Abatement Courtesy

2.3.1 Departing Aircraft

- All aircraft departing from any runway at Motueka (including overshoot or touch and go manoeuvres) should track runway heading until at or above 500ft AMSL prior to commencing a left turn.

Note: The purpose of the 500ft rule is to avoid making turns over the residential areas. However, deviation from the runway heading may be undertaken as an aide to proximity to forced landing areas.

- If making a right turn off 02, all aircraft should endeavour to maintain runway heading until clear of the coastline and reduce power to the minimum required for climb out as soon as safely practical.

2.3.2 Use of Full Runway

- Full runway length should be used for take-off whenever practicable. All aircraft should reduce to climb power as soon as possible, consistent with safe operation. Pilots of all aircraft should use their best endeavours to achieve a maximum height at the airfield boundary.

2.3.3 Circuits

- Circuits below 1000ft AMSL should only be carried out in the 02 circuit, therefore avoiding the Motueka township.
- Aircraft, where possible, are asked to avoid orbiting within the aerodrome circuit except in an emergency.

2.4 Equipment Requirements

Motueka is a mandatory broadcast zone and all procedures are to be carried out as prescribed in Civil Aviation Rule 91.135 and detailed in the AIPNZ.

2.5 Taxiing

- Aircraft with low propeller clearance are advised to exercise extreme caution when taxiing on Motueka Aerodrome.
- Aircraft should not taxi close to helipads when helicopters are taking off or landing. Check approach path for landing helicopters before passing helipads.
- Helicopters undertaking hover taxiing exercises and/or 180 auto-rotations should notify taxiing and landing aircraft before this is carried out and at all times remain clear of aircraft doing run-ups.
- Aircraft must not taxi through the parachute landing area (PLA) when parachuting is in progress (the PLA is active).
- Parachuting is considered to be in progress when the pilot of the parachute aircraft has advised that parachute dropping is in progress. The PLA becomes inactive after the last canopy has landed.
- Helicopters must not start after refuelling at the pumps until they determine that the LA is inactive.
- Taxiing aircraft are to give way to aircraft vacating the runway.

2.6 Circuit and Runway Operations

- Each pilot in command shall ascertain the runway in use prior to entering any runway.

- Fixed wing and helicopter circuits should conform to the same runway direction.
- The standard circuit altitude is 1000ft AMSL. Helicopters may circuit at 800ft AMSL slightly closer in to the runway.
- Low level circuits of 600ft AMSL may take place in the 02 circuit only at times when there will be no conflict caused with standard circuit traffic.
- If a pilot wishes to change position in the circuit it must only be done when deemed safe and only after establishing contact and advising other traffic.
- Aircraft, where possible, are asked to avoid orbiting within the aerodrome circuit except in an emergency. This would mean that aircraft may choose to slow down or extend that circuit leg where necessary to accommodate the emergency situation.

2.7 Go Around Procedures

2.7.1 Go Around Decision

Where practicable, the go around decision should be made prior to 300ft AMSL.

2.7.2 Go Around Actions

On go around from a bailed landing, track runway heading to the minimum height needed. If not directly continuing in the circuit climb runway heading until clear of the circuit and carry out the appropriate rejoining procedure. The positions of other aircraft and in particular the positions of parachutes and microlights must be taken into account when going around.

2.8 Wake Turbulence

Pilots should be aware of wake turbulence from all larger aircraft and down wash from helicopters.

2.9 Runway Changes

Any pilot can initiate a runway change when required by wind changes or sun-strike. Pilots must advise their intention to change runway direction with other circuit traffic before initiating the change.

2.10 Parachute Landing Area NXP 617

NXP 617 Parachute Drop Zone is situated South 41 07 23.8 E172 59 18.5

2.11 Low Flying over Coastal Motueka

Due to the nature of the sensitive wildlife on the Motueka sandspit all pilots are requested not to fly below 1000ft AMSL over the entire length of the sandspit and to remain seaward of the sandspit when transiting to the LFZ.

3.0 Arrivals

Arrivals are in accordance with standard joining procedures except when the Parachute Landing Area is active, in which case overhead rejoins are **not** to be carried out. Joining traffic must remain clear until all canopies have landed or join via another procedure.

4.0 Departures

Aircraft turning right after departing the circuit from 02 should maintain runway centre line until clear of the coast or above 1000ft AMSL.

5.0 Training Operations

5.1 Training Areas

The standard training areas used in the Motueka area are – Kaiteriteri, Tasman, Mapua, Upper Moutere, Lower Moutere, Ngatimoti, Riwaka and the Motueka, Tasman Bays LFZ 664. Helicopters also use Fern Flat and Canaan Downs areas (see Appendix 1).

Where possible, aircraft should fly at a different altitude than an aircraft operating in an adjacent area in order to increase separation. Pilots should vary their training areas to achieve an even use of all areas, in order to reduce the noise footprint for individual training areas.

Due to the presence of livestock in the rural areas, pilots need to be mindful of the effect of flight training activities and exercise caution where and when appropriate, eg especially in spring during lambing and calving, and in the proximity of horses and riders.

In the Upper Moutere area, local aircraft are asked to remain above a minimum altitude of 500ft AGL. This height is required for aircraft flying in the Upper Moutere training area due to the close proximity of houses in the area. This altitude is designed to achieve adequate clearance from the overlapping “no-fly” cylinders in compliance with Rule Part 91. However aircraft may carry out an approach and/or landing to any of the agriculture strips in the area for the purposes of commercial work (eg top dressing), and the Rosedale, Ngatimoti or old Baigent strips for training purposes. Circuits for training on these strips should not be below 500ft AGL until on approach.

Circuits and landings may also be carried out on the Tasman airstrip in the Tasman training area.

Nelson Aviation College has permission from the landowners to carry out helicopter training, including landing, at both Fern Flat and Canaan Downs. These areas are shown in Appendix 1 Training Areas.

5.2 LFZ 664

The Motueka, Nelson Bays Low Flying Zone is operated by Nelson Aviation College (NAC). Anybody wishing to use this area must have prior permission from NAC. Use of this area must be IAW Civil Aviation Rule Part 91 especially rule 91.131. Nelson Aviation College has also imposed a lower limit of 200ft AMSL to ensure the safety of pilots and the protection of birdlife. The only exception to this rule is that helicopters conducting training are permitted to land in this area.

Boundaries are as outlined in the New Zealand Air Navigation Register.

6.0 Communications

6.1 Transmissions

6.1.1 Listening for Transmissions

All pilots must listen out before transmitting – not just for a gap in transmissions, but also to understand the nature of the previous transmission to achieve and enhance situational awareness.

6.1.2 Accuracy of Position Reports

Position reports need to be accurate, giving position relative to a visual reporting point or prominent mark on the Visual Navigation Chart.

6.1.3 “Motueka Traffic” Transmission

Transmit “Motueka Traffic” **only** at the beginning of the transmission. Broadcasting the aerodrome designation twice applies to unattended aerodromes using the 119.1MHz frequency.

7.0 Miscellaneous Operations

7.1 Aircraft Parking

- Overnight parking with tie-down facility is available for itinerant aircraft in the area designated in the AIP Motueka Aerodrome chart.
- No parking in the Parachute Landing Area.
- Taxiways are to be kept clear at all times – no parking permitted.
- All apron areas and access ways to hangars and fuel installations are to be kept clear at all times.

7.2 Aviation Events and Displays

7.2.1 Aviation Event/Display Approval

Aviation Events and displays, as defined in Civil Aviation Rule Part 1, are subject to the approval of the Motueka Aerodrome Operator, and must be in accordance with Civil Aviation Rule Part 91.703.

7.2.2 Event Co-ordination

Any event on the aerodrome is to be co-ordinated with all airport tenants.

8.0 Bird Hazards

8.1 Bird Types

The presence of birds, especially Spur-Winged Plovers on the runways at Motueka is a constant problem, particularly at certain times of the year. Pilots must exercise extreme caution.

9.0 Aerodrome Emergency Procedures

9.1 Emergency Procedures

Detailed Motueka Aerodrome emergency procedures are contained in the Motueka Aerodrome Emergency Plan document which is available from the Tasman District Council.

Note: Accidents must be reported to CAA (0508-ACCIDENT or 0508-222433). Prior to any aircraft or debris being moved or removed from the crash site, permission shall be sought from the CAA.

9.2 Aircraft Undercarriage Emergencies

9.2.1 Landing Procedure

Motueka Aerodrome does not have an on-airfield Rescue Fire Service, therefore the Aerodrome Operator recommends that the pilot of an aircraft with an unsafe undercarriage indication should either divert to Nelson aerodrome for a landing or delay landing until Emergency Services are in position on the airfield; except that conditions of low fuel endurance, deteriorating weather or other factors, may force the pilot to land without delay.

9.2.2 Emergency Communications

The pilot should advise NELSON ATC on 127.4 Mhz of the nature of the problem and their intentions. If the pilot wishes to land at Motueka, a Full Emergency phase must be declared. The pilot is encouraged to hold overhead the airfield until Fire Service gives the go ahead to land.

Appendices

Appendix 1 Training Areas

Motueka Aerodrome Signatories:

Tasman District Council (Aerodrome Operator)

Signature: 

Date: 12/03/2015

Abel Tasman Skydive

Signature: 

Date: 17/9/14

Nelson Aviation College

Signature: 

Date: 12.09.14

Nelson Aero Club

Signature: 

Date: 23/9/14

TNT Helicopters

Signature: 

Date: 25-2-15

Abel Tasman Air

Signature: 

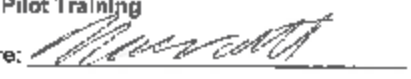
Date: 17-9-14

Motueka Aero Club

Signature: 

Date: 19/9/14

Nelson Pilot Training

Signature: 

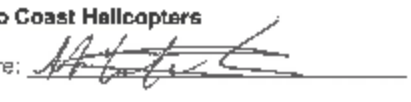
Date: 23/9/14

Tasman Sky Adventures

Signature: 

Date: 19/9/14

Coast to Coast Helicopters

Signature: 

Date: 20.2.15

Marcie and Bill Hanes

Signature: _____



Date: _____

Tahoe Farm Family Trust (John Richards)

Signature: _____



Date: _____



Northern End - Airport Height Limitation

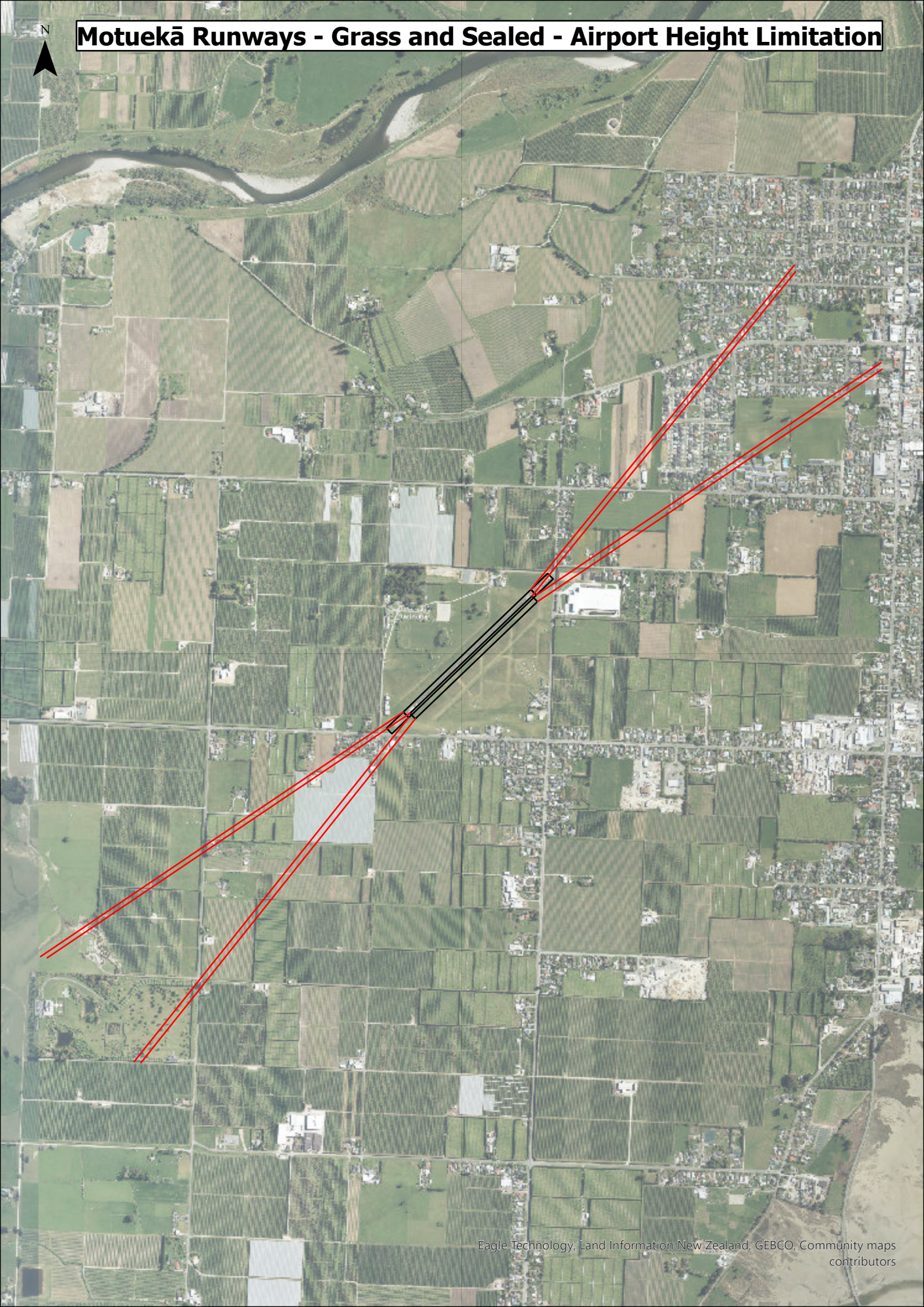




Southern End - Airport Height Limitation



Motuekā Runways - Grass and Sealed - Airport Height Limitation



Civil Aviation Rules



Part 157

Notice of Construction, Alteration, Activation, and Deactivation of Aerodromes

First effective 8 July 1993

Incorporating:
Amendment No 1 8 February 1996

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List of Rules

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157.1 Applicability

- (a) This Part prescribes rules for persons proposing to construct, alter, activate, or deactivate an aerodrome or heliport of the kind specified in paragraph (b).
- (b) This Part applies to an aerodrome or heliport unless it is—
- (1) an aerodrome that is required to be certificated under Part 139;
or
 - (2) an aerodrome or heliport restricted to VFR operations that is used or intended to be used for a period of less than 7 days in any 30 consecutive day period; or
 - (3) an aerodrome used or intended to be used exclusively by aircraft engaged in agricultural operations and that is not located inside a control zone and that is located more than—
 - (i) 5 nautical miles (9 kilometres) from the nearest other aerodrome; and
 - (ii) 3 nautical miles (6 kilometres) from the nearest heliport;
or
 - (4) a heliport used or intended to be used exclusively by helicopters engaged in agricultural operations and that is not located inside a control zone and that is located more than -
 - (i) 3 nautical miles (6 kilometres) from the nearest aerodrome; and
 - (ii) one nautical mile (2 kilometres) from the nearest other heliport.

157.3 Definitions

For the purposes of 157.1 and 157.5:

"Aerodrome" does not include a defined area of land or water intended or designed specifically for use by helicopters:

"Heliport" means any defined area of land or water, and any defined area on a structure, intended or designed specifically for use by helicopters.

157.5 Projects requiring notice

Each person who intends to do any of the following (who in this Part is referred to as a 'proponent') shall notify the Director in the manner prescribed in 157.7:

- (1) construct or otherwise establish an aerodrome or heliport to which this Part applies or activate such an aerodrome or heliport:
- (2) construct, re-align, alter, or activate any runway or other aircraft landing or take-off area of an aerodrome or heliport to which this Part applies:
- (3) increase the use of an established aerodrome or heliport restricted to VFR operations to more than 7 days in any 30 consecutive day period:
- (4) deactivate, discontinue using, or abandon an aerodrome or heliport to which this Part applies, or any landing or take-off area of such an aerodrome or heliport, for a period of one year or more.

157.7 Notice of intent

(a) The notice required by 157.5(1), (2) and (3) shall be submitted on CAA Form 24157/01 to the Director at least 90 days before the day that work is to begin.

(b) The notice required by 157.5(4) shall be submitted in writing at least 30 days before the date planned for deactivation, discontinuance of use, or abandonment.

157.9 Aeronautical study

(a) On receiving a notification under 157.7 (a), the Director shall conduct an aeronautical study.

(b) In conducting the aeronautical study, the Director shall consult with such persons, representative groups, and organisations as the Director considers appropriate.

(c) The purpose of the aeronautical study shall be to consider the effects that the proposed action would have on the safe and efficient use of airspace by aircraft, and on the safety of persons and property on the ground. In particular, the aeronautical study shall consider the following:

- (1) the effect the proposed action would have on existing or contemplated aerodrome traffic circuits of neighbouring aerodromes:
- (2) the effect the proposed action would have on existing and projected airspace uses:
- (3) the effect the proposed action would have on the safety of persons and property on the ground:
- (4) the effect the existing or proposed man-made objects and natural objects within the affected area would have on the proposed action.

157.11 Aerodrome determination

(a) On completion of the aeronautical study, the Director shall issue to the proponent, appropriate local authorities, and other interested persons an aerodrome determination which shall be one of the following :

- (1) **Unobjectionable:** An unobjectional determination shall be made when the Director is satisfied that the proposed action will not adversely affect the safe and efficient use of the airspace by aircraft nor the safety of persons or property on the ground:
- (2) **Conditional:** A conditional determination shall be made when the Director identifies objectionable aspects of a proposed action but specifies conditions which, if complied with, satisfy the Director that the proposed action will not adversely affect the safe and efficient use of the airspace by aircraft nor the safety of persons or property on the ground:
- (3) **Objectionable:** An objectionable determination shall be made when the Director identifies objectionable aspects of a proposed action and shall specify the Director's reasons for finding the proposed action objectionable.

(b) Unobjectionable and conditional aerodrome determinations shall contain a determination void date in order to facilitate efficient planning for the use of the navigable airspace.

(c) All work or action for which a notice is required by this Part shall be completed by the determination void date. Unless otherwise extended, revised, or terminated, an aerodrome determination becomes invalid on the day specified as the determination void date.

(d) Interested persons may, at least 15 days in advance of the determination void date, petition the Director to—

- (1) revise the determination based on new facts that change the basis on which it was made; or
- (2) extend the determination void date.

157.13 Notice of completion

The proponent shall notify the Director in writing of the completion of any action notified under 157.5 within 15 days of the completion.



Guidance material for land use at or near aerodromes

June 2008

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Overview

The environment at and surrounding an airport has unique characteristics that impact on land use. Specific requirements for the operation of aircraft, airport design and airspace management are covered in the Civil Aviation Act 1990 and Civil Aviation Rules. The regulatory oversight of these requirements is undertaken by the Director of Civil Aviation and the Civil Aviation Authority of New Zealand.

New Zealand is a signatory to the Convention on International Civil Aviation (the Chicago Convention) which is a set of international requirements for civil aviation coordinated through the International Civil Aviation Organisation (ICAO). New Zealand has adopted the ICAO standards and recommended practices as the basis for New Zealand Civil Aviation Rules (CARs).

Aerodrome operators in New Zealand should monitor and review land use activities around their aerodrome to ensure the safe operation of aircraft and protection of airspace. Those persons making changes to land use must ensure that they comply with any applicable CARs, local authority planning requirements and work with aerodrome operators in land use changes.

The following provides guidance for those persons proposing land use changes around aerodromes and identifies specific points to be taken into account.

Glossary

Aerodrome—

- (1) means any defined area of land or water intended or designed to be used either wholly or partly for the landing, departure, and surface movement of aircraft; and
- (2) includes any buildings, installations, and equipment on or adjacent to any such area used in connection with the aerodrome or its administration.

(An aerodrome includes a heliport)

Civil Aviation Rules means rules made under the Civil Aviation Act.

Types of Aerodromes

Many aerodromes in New Zealand hold a Civil Aviation Rule Part 139 aerodrome operating certificate. These include international and large domestic aerodromes. The Part 139 certificate is required for aerodromes where aircraft with more than 30 passenger seats operate regular air transport operations. Aerodromes that do not meet the more than 30 passenger seat criteria may also hold a Part 139 certificate. The Part 139 certificate requires the aerodrome operator to comply with a range of rules and requirements including ongoing CAA oversight.

Under Part 139, there are two specific requirements to be met for land use; Obstacle Limitation Surfaces and Wildlife Hazard Management.

The remainder of New Zealand's aerodromes are non-certificated. The only CAR requirements on a non-certificated aerodrome are those that form part of the operating requirements for any airline or aircraft operator that uses the aerodrome.

Obstacle Limitation Surfaces

Under CAR 139.51 an aerodrome operator must have in place obstacle limitation surfaces for the aerodrome that are defined surfaces in the airspace above and adjacent to the aerodrome. These obstacle limitation surfaces are necessary to enable aircraft to maintain a satisfactory level of safety while manoeuvring at low altitude in the vicinity of the aerodrome. These surfaces should be free of obstacles and subject to control such as the establishment of zones, where the erection of buildings, masts and so on, are prohibited.

More information on obstacle limitation surfaces (OLS) can be viewed online at www.caa.govt.nz under Advisory Circulars.

For Part 139 certificated aerodromes the OLS requirements can be found in Chapter 4 of CAA Advisory Circular AC139-6.

For non-certificated aerodromes the OLS requirements can be found in Chapter 3 of CAA Advisory Circular AC139-7.

For heliports the OLS requirements can be found in Chapter 4 of CAA Advisory Circular AC139-8.

The OLS surfaces are normally published in the local District Plan and can also be sourced directly from the aerodrome operator.

It is important that any proposed building or structure does not infringe required OLS areas. Consultation with the aerodrome operator and the relevant local authority at an early stage is essential.

Wildlife Hazard Management

Under CAR 139.71 an aerodrome operator must establish an environmental management programme to minimise or eliminate any wildlife hazard that presents a hazard to aircraft operations at their aerodrome in areas within their authority.

The management of wildlife, especially birds, is critical for aircraft operational safety. Bird strikes put the lives of aircraft crew members and their passengers at risk. In the United States over 7,500 bird and other wildlife strikes were reported for civil aircraft in 2007. Bird and other wildlife strikes to aircraft annually are estimated to cause well over \$600 million in damage to civil and military aviation in the United States alone.

It is important that land use changes are monitored and reviewed by the aerodrome operator in areas outside their immediate control to ensure that these land use changes do not increase wildlife hazards for the aerodrome.

Garbage disposal dumps and other sources that may attract wildlife activity on, or in the vicinity of, an aerodrome, need to be assessed as a potential source of wildlife hazard. It is

an International Civil Aviation Organisation requirement that such activities are closely managed by the controlling authority. If necessary an aeronautical study may need to be undertaken to assess the potential wildlife activity hazard.

Examples of wildlife attractants include:

- Refuse Dumps and landfills
- Sewage Treatment and Disposal
- Agricultural - cultivation of land, types of activity e.g. pig farming.
- Fish processing plants
- Cattle feed lots
- Wildlife refuges
- Artificial and natural lakes
- Animal farms
- Abattoirs and freezing works

Proper planning of these activities and their impacts on wildlife should be undertaken. It should be noted that aircraft approach and departure areas may extend for a distance from the aerodrome runway, therefore wildlife impacts on aircraft activities may not be immediately apparent. Consult the aerodrome operator as early in the planning as possible.

The International Civil Aviation Organisation provide specific environmental management and site planning information on the following:

Refuse dump or landfills

If a refuse dump is proposed in the vicinity of the aerodrome there may be a requirement to provide bird control at the site to reduce the attractiveness to birds. The potential threat to aircraft depends on location relative to airport and flight paths, type of refuse, and the types of birds expected in the vicinity.

The ICAO Bird Control and Reduction Manual recommends that refuse dump sites be located no closer than 13 kilometres from the airport property. The proper siting of refuse dumps can reduce hazard and any location should be analysed by a group of specialists on bird problems.

Water

Surface water is a large bird attractant and developments that have drainage ditches, artificial waterways and large areas of water close to an aerodrome may attract birds and other wildlife.

In the ICAO Bird Control and Reduction Manual it is noted that in the vicinity of an aerodrome artificial and natural lakes increase the bird strike hazard depending on the size and the shape of the lake, its ecological state and the surroundings. It is recommended that

an ornithologist/biologist evaluate the ecological conditions of the whole vicinity as well as migration in the area. The bird strike hazard can be reduced if the lake is made smaller and the shores steeper, and if fishing, hunting and water sports are forbidden. Filling a lake with soil or covering the surface with wires and nets are two of the better solutions to the problem.

Notice of Intention to Construct, Alter, Activate or Deactivate an Aerodrome

Civil Aviation Rule Part 157 requires that prior notice be given to the Director of Civil Aviation whenever a person intends to construct, alter, activate or deactivate an aerodrome. This notice will enable the Director to identify whether the use of the airspace associated with the aerodrome proposal will be a hazard to other established airspace users. It will also allow identification of problems to do with the safety of persons and property on the ground.

It is also necessary to consider efficient use of airspace at an early stage. The Director, after receiving such notice, will give advice on the effects the proposal would have on the use of navigable airspace by aircraft and on the safety of persons and property on the ground. An aeronautical study will be undertaken and a determination on the proposal made.

The Part 157 rule requirements and Part 157 Advisory Circular are available on the CAA web site www.caa.govt.nz

There is also a Part 157 information leaflet available from CAA or at: http://www.caa.govt.nz/aerodromes/Aero_Studies_Pt157_info.pdf

Objects and Activities Affecting Navigable Airspace

Civil Aviation Rule Part 77 prescribes rules for a person proposing to construct or alter a structure that could constitute a hazard in navigable airspace; or use of a structure, lights, lasers, weapons, or pyrotechnics, that could constitute a hazard in navigable airspace.

There are several areas that require a Part 77 application for a determination on such objects and activities including:

- A structure that extends more than 60 m in height above the ground level at its site.
- A structure that exceeds the general tree height in the area by 18 m and is located in an area of low level aerial activity or other low flying activity, or in a low flying zone or low level route as prescribed under Part 71.
- A structure that is located below the approach or take-off surfaces of an aerodrome as defined in Part 77.
- A structure that penetrates the obstacle limitation surface of an aerodrome.

- A person proposing to use a structure that may discharge efflux at a velocity in excess of 4.3 m per second through an obstacle limitation surface of an aerodrome or higher than 60 metres above ground level.
- A person proposing to operate a light or a laser if the light or laser is liable to endanger aircraft.
- A person or organisation that proposes to use a weapon that fires or launches a projectile that has a trajectory higher than 45 m if within 4 km of an aerodrome boundary, or 120 m if more than 4 km from an aerodrome boundary.
- A person who proposes to stage a pyrotechnics display that involves the firing or launching of a projectile that has a trajectory higher than 45 m if within 4 km of an aerodrome boundary or 120 m if more than 4 km from an aerodrome boundary.

A person proposing to construct or alter a structure must notify the Director of Civil Aviation 90 days before the proposed date of commencement of construction or alteration. The specific requirements are detailed in Civil Aviation Rule 77.13.

An aeronautical study will be undertaken and a determination on the proposal made.

Full details and information on Part 77 requirements are available in the Part 77 Rule which can be accessed at the CAA web site www.caa.govt.nz.

Noise Issues

Noise issues to do with aerodromes are the responsibility of the local controlling authority and the CAA does not have any statutory function in relation to aircraft or aerodrome noise. The Minister does produce rules relating to noise abatement measures under Civil Aviation Rule Part 93 which are published on behalf of the aerodrome operator from local authority requirements.

Local Authority Zoning

The CAA encourage local authorities to protect aerodromes in their areas to ensure the long term sustainability of the aerodrome, the safety of the aircraft operations, and the safety of persons and property. In addition to the required obstacle limitation surfaces other areas can be specifically zoned to assure that future uses of the land are compatible with airport operations and to protect persons and property. Zoning solely to obstacle limitation surface is insufficient to prevent the construction of incompatible uses such as housing or uses that attract congregations of people in the approach areas.

In the United States a runway protection zone (RPZ) is used by many local authorities for the protection of people and property on the ground. Compatible land use within the RPZ is generally restricted to such land uses as agricultural, golf course, and similar uses which do not involve congregations of people or construction of buildings or other improvements that may be obstructions. Land uses prohibited from the RPZ are residences and places of public assembly including churches, schools, hospitals, office buildings and shopping centres.

Summary

Aerodromes have an important role in aviation safety in particular the safety of aircraft and passengers. In New Zealand the Civil Aviation Authority oversees aviation safety based upon international aviation requirements. It is important that persons wanting to alter land use near an aerodrome do so in consultation with the aerodrome operator, the relevant local authority and, where necessary, the Civil Aviation Authority.

It is important that land use changes near aerodromes are also compliant with any Civil Aviation Rule requirements.

Contacting the CAA

The Aeronautical Services Unit of the CAA has responsibilities for the oversight of the services supporting the New Zealand aviation system. The unit is responsible for certification and surveillance of aerodromes and heliports, and air traffic, telecommunications, navigation, meteorological and aeronautical information services.

The unit also has responsibilities regarding airspace and Part 77 determinations for objects affecting navigable airspace, such as structures, fireworks, unmanned balloons, kites and model aircraft. They can offer advice on matters relating to Part 139 certificated aerodromes and Part 157 aerodrome determinations.

They can be contacted by phoning the CAA on 04 560 9400 or through specific contact details on the CAA web site www.caa.govt.nz