APPENDIX C: Memorandum of Understanding

Revised April 2018

Motueka Aerodrome Memorandum of Understanding

Introduction

This memorandum of Understanding (MOU) has been approved by the Motueka Aerodrome Operations Committee on behalf of the Tasman District Council, the owner of Motueka Aerodrome, and is intended as a best practice guide to pilots and aircraft operators who use Motueka Aerodrome. It brings together information and practices that have evolved over the years or appeared in a variety of publications, and is the result of extensive consultation with local operators.

The high traffic density for an uncontrolled aerodrome (Motueka) often catches pilots by surprise, so this manual provides procedures which enable a safe, orderly and expeditious flow of traffic.

This document is made freely available to any person requiring access to the information and is available on the Tasman District Council website www.tasman.govt.nz.

Please note: Time references throughout this document are in local time not UTC.

Disclaimer: While every effort has been made to ensure the accuracy of all information in this document, the changing nature of aviation requirements could result in sections of this publication becoming outdated. In the event of conflict, NZ Civil Aviation rules and the AIPNZ take precedence.

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1.0 General

1.1 Motueka Aerodrome

1.1.1 Tasman District Council

Tasman District Council (Council) owns and operates Motueka Aerodrome. Council 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.

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;
- 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

Council, 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 (MOU)

1.2.1 Aim

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

1.2.2 Purpose

The purpose of the MOU 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.

1.2.3 Signatories to this MOU

All persons operating aircraft at Motueka Aerodrome on a regular basis or who use Motueka Aerodrome as their base for operations are required to be "signatories" to this MOU.

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 ethics:

- 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 or at low level (i.e. 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 take-off 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 (e.g. 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".

1.3.2 Civil Aviation Rule (CAR) 91.127 Use of Aerodromes

CAR 91.127 states "no person may operate an aircraft at an aerodrome unless - (1) that person complies with any limitations and operational conditions on the use of the aerodrome notified by the Aerodrome Operator.

Note: Any breach of CAA rules by a pilot or aircraft operator at any stage will be reported to CAA in accordance with CAR part 12. It is the responsibility of the pilot in command to report such occurrences to CAA via CAA005 form."

1.4 Specific Operational Considerations

Motueka Aerodrome currently has several different types of operation which affect 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 the aerodrome.

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 must not be deliberately targeted.

- 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 start at the runway threshold for take-off to minimise noise as much as possible.
- Night cross-country flight routes, particularly over Motueka, shall, where possible, be varied and kept seaward of Motueka after 9.00pm. Note: Motueka Aerodrome is only available for use during the hours of daylight.

1.4.4 Helicopters

Where possible, pilots are to observe the following:

- Houses and farm buildings must not be deliberately targeted.
- Power settings and flight profiles should be in accordance with the manufacturer's specifications for minimum noise levels consistent with safety.
- 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 (Low Flying Zone) 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 floodlit hangar in a way which will minimise noise on return to Motueka. Landings are to be no later than 10.30pm except in the case of an emergency.
- Please avoid Marchwood Park during equestrian events.

1.5 Complaints

Perceived transgressions of the "Flying Neighbourly" procedures set out herein may be reported to the Tasman District Council Aerodrome Operator and due investigation will occur to encourage pilots to comply.

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 not 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 aid to proximity to forced landing areas.
- Aircraft not departing via the circuit should maintain runway heading until outside the circuit (2 nautical miles) prior to turning right.

2.3.2 Circuits

- A Circuit plan for Motueka Aerodrome is attached as Appendix 2.
- Circuits below 1000ft AMSL should only be carried out in the 02 circuit, therefore avoiding the Motueka township.
- Where possible, aircraft 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 PLA 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 Actions

On go around from a balked 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 downwash 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 NZP 617

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

2.11 Low Flying over Coastal Motueka

Pilots are requested to be mindful of the wildlife on the Motueka Sand spit and not fly below 1000ft AMSL over the entire length of the Sand Spit. They are also requested to remain seaward of the Sand Spit when transitioning to the LFZ unless necessary for safety purposes.

3.0 Arrivals

Arrivals are in accordance with standard joining procedures except when the Parachute Landing Area is active, in which case overhead re-joins 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, e.g. 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 (e.g. 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.

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 Conditions of Use

The Motueka Aerodrome Management Plan sets out the conditions of use for Motueka Aerodrome, which are to be observed by all pilots and aircraft operators.

7.2 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.

7.3 Aviation Events and Displays

7.3.1 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.

7.3.2 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 website, www.tasman.govt.nz.

Note: Accidents must be reported to the CAA (0508-ACCIDENT or 0508-222433). .

9.2 Aircraft Undercarriage Emergencies

9.2.1 Landing Procedure

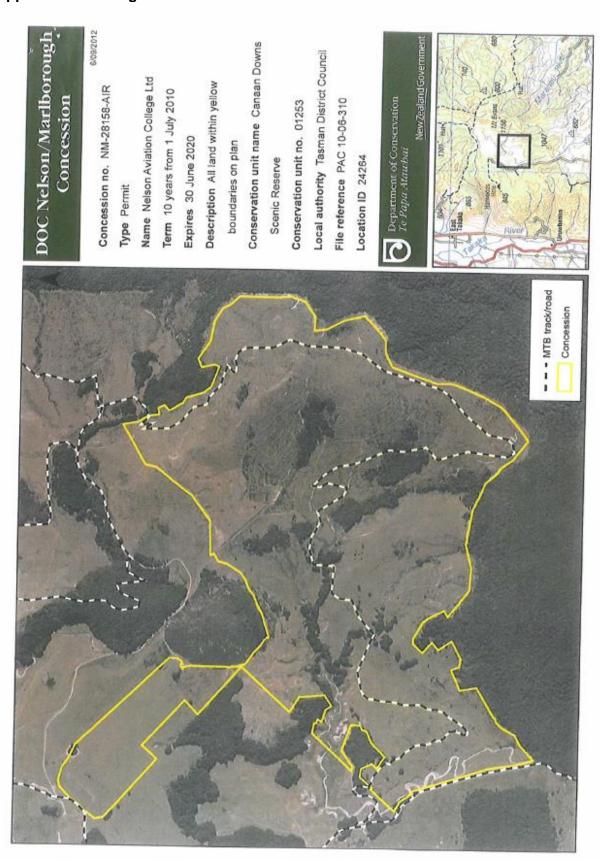
Motueka Aerodrome does not have an on-airfield Rescue Fire Service, therefore the Aerodrome Operator recommends that the pilot of an aircraft with an unsafe undercarriage indication should either divert to Nelson aerodrome for a landing or delay landing until Emergency Services are in position on the 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 the Fire Service gives the go ahead to land.

Appendices

Appendix 1 Training Areas



Appendix 2 Circuit Map



The circuit is an orderly pattern used to position the aeroplane for landing and minimise the risk of collision with other aircraft.

Airfields attract aircraft, therefore rules and procedures are required to maintain an orderly sequence or flow of traffic. All aircraft should be following these published procedures making it easier to identify which runway should be used, where other aircraft are or expected to be, and who has the right of way in the sequence to takeoff or land.