Every effort is made to ensure that the information in this booklet is accurate and up to date at the time of publishing, but numerous changes can occur with time, especially in regard to airspace and legislation. Readers are reminded to obtain appropriate up-to-date information.
Contents

Introduction ........................................ 4
Pre-flight Preparation ......................... 5
Airspace Overview ............................. 6
Controlled Airspace ........................... 6
VFR Transit Lanes ............................... 8
Special Use Airspace .......................... 8
General Aviation Areas ........................ 13
Transponder Mandatory Airspace ........... 14

Aerodromes
AR Ardmore ....................................... 15
Ardmore Airspace ............................. 16
AA Auckland ...................................... 30
Auckland Airspace ............................ 32
Drury ............................................... 36
GB Great Barrier Island ...................... 38
KF Kaipara Flats ............................... 40
ME Mercer ........................................ 42
NE North Shore ................................ 44
PI Parakai ........................................ 52
KE Waiheke Island ............................ 54
WP Whenuapai ................................. 58

CAA Web Site
See the CAA web site for Civil Aviation Rules, Advisory Circulars, Airworthiness Directives, forms, and more safety publications.

www.caa.govt.nz
Introduction

Auckland is home to the busiest and some of the more complex airspace in New Zealand. Not only does it have the largest number of aircraft movements per year, but it also facilitates the operation of numerous aircraft types with vastly different performance – from microlights to large jets.

With 11 aerodromes, two CTRs (control zones), and numerous MBZs (mandatory broadcast zones), CFZs (common frequency zones), VFR transit lanes and GAAs (general aviation areas) all packed within a 25 NM radius of Auckland aerodrome, the potential for an incident or airspace infringement is very real.

It is crucial that pilots are thoroughly familiar with the airspace structure and local aerodrome procedures before flying in the area – especially if they are new to the region.

This booklet aims to provide VFR pilots with an overview of Auckland’s airspace structure, its aerodromes and their associated arrival/departure procedures, and other local information. It should be studied in conjunction with the applicable VNCs (visual navigation charts) and sections of AIP New Zealand, Vols 1 and 4, and is intended to complement the information provided by them.
Pre-flight Preparation

Thorough pre-flight preparation is always going to be the key to an incident-free flight through busy airspace. It is therefore important to spend time studying the relevant charts and sections of AIP New Zealand, Vol 4 before taking to the air. Reading the most up-to-date AIP supplements and NOTAMs will alert you to any changes. It is your responsibility as pilot-in-command to obtain this information before getting airborne.

Documents

Visual navigation charts

Ensure that you have a full set of up-to-date VNCs, because airspace does change. A large number of airspace incidents are caused by pilots referring to out-of-date charts. Ignorance is no excuse. VNCs are readily available from Aeropath or your local flight-training organisation. Refer to the current AIP supplements for a list of current VNCs.

AIP New Zealand, Vol 4

Information about arrival and departure procedures for the key aerodromes in the Auckland area is in AIP New Zealand, Vol 4. In particular, the Ardmore and Auckland aerodrome sections contain some very detailed arrival and departure instructions. You need to be totally familiar with these before flying into those aerodromes.

The importance of taking the time to thoroughly read all the relevant aerodrome pages before a flight cannot be emphasised enough. Having the appropriate arrival or departure page open when approaching or leaving an aerodrome, and cross-referencing to the VNC, is also good airmanship.

Communication

Keeping safe in such a high traffic area requires good communication. It is essential to use the correct frequency, maintain a listening watch, and make appropriate position reports. This is particularly true for pilots of aircraft transiting along the east coast, who may have to make up to four frequency changes within a very short space of time. To avoid frequency clutter, the duration of radio calls should be kept to the minimum by using standard RTF phraseology as outlined in Advisory Circular 91-9 Radiotelephony Manual. (See also the GAP booklet Plane Talking.) Always check that you are on the appropriate frequency for the airspace you are in at any given time. If you are in an MBZ for example, you need to be on the frequency for that MBZ. On leaving the MBZ, change to the FISCOM frequency if in uncontrolled airspace, or the CFZ frequency if you have gone from the MBZ to a CFZ. There are many combinations, but the point is that you must be on the frequency used by other traffic in the area in order to maintain
situational awareness. Plan your frequency changes well ahead of time, preferably during pre-flight planning.

**Local Knowledge**

When planning a flight, everything you need to know should be found by studying *AIP New Zealand, Vol 4*, the VNCs, AIP supplements, and NOTAMs.

Additionally, we suggest that if you are new to flying in the Auckland area, you ask a pilot with experience of the region to brief you on what to expect. If such a person is not readily available, a call to an Auckland-based operator would be worthwhile.

**Airspace Overview**

We have provided 3-D airspace diagrams to help your understanding of Auckland’s airspace. Referring to the appropriate VNC while reading this booklet is also recommended. All altitudes are above mean sea level (AMSL) unless otherwise stated.

**Controlled Airspace**

**Control areas**

The greater Auckland area is overlaid with a block of controlled airspace from 9500 feet to flight level (FL) 600, extending laterally in a 100 NM radius circle centred on Auckland aerodrome, with an extension to the south and southeast to cover north of the line, New Plymouth to Napier. Apart from IFR aircraft, other activities such as gliding and aerial photography take place in this airspace. Occasionally, VFR aircraft will overfly Auckland at these higher levels as a controlled VFR flight.

The more immediate Auckland area is overlaid with a block of Class C airspace centred on Auckland and Whenuapai aerodromes, extending from 1500 (2500 above Whenuapai) to 9500 feet, arranged in an ‘inverted wedding cake’ structure.
These control areas are stepped to facilitate the arrival and departure of IFR aircraft in such a way as to keep them separate from the VFR traffic operating beneath.

The reason for the northern and southern portions of the control area being centred on different datum points (Auckland and Whenuapai), is to provide pilots and controllers with a reference distance for aircraft arriving at and departing from each respective aerodrome.

Joining

Pilots of VFR aircraft joining need to know where each section of the control area steps down and organise their descent profile to be at or below that level well beforehand. Flying 100 feet below the lower limit of a control area is good aviation practice, as it allows for any unintentional altitude deviations.

Control zones

There are two control zones (CTRs) in the Auckland area – Auckland and Whenuapai.

Auckland

The Auckland CTR is Class C airspace and extends from the surface to 1500 feet, and laterally in an irregular ovoid shape approximately 8 NM to the northeast and southwest, 7 NM to the southeast and 4 NM to the northwest. This shape protects the arrival/departure fan for IFR traffic using Runway 05R/23L. This is designated as the “Instrument Sector” on the VNCs, the remainder of the CTR comprising North and South Sectors.

A slight indentation in the southeast corner of the CTR accommodates the Ardmore MBZ. There is one permanently active danger area (Otahuhu, surface to 1500 feet) within the CTR.

The Auckland CTR can be extremely busy airspace, and VFR general aviation pilots are advised to avoid it in peak periods unless it is absolutely necessary to be there.

Whenuapai

The Whenuapai CTR is Class D airspace and extends from the surface to 2500 feet, and laterally in a racetrack pattern 14 NM to the southwest and northeast, and 5 NM to the northwest and southeast. The North Shore CFZ protrudes into the northeast corner. The CTR has VFR transit lanes at its northeastern and southwestern ends to allow traffic to move freely back and forward along both coastlines.

The aerodrome is surrounded by a 3 NM radius military operating area (MOA), which means that all aircraft wishing to enter must have prior approval from Base Operations, RNZAF Auckland, Tel (09) 417-7442.
The Onetaunga Bay danger area (explosives hazard, surface to 1500 feet) is situated 3.5 NM to the southeast of the aerodrome, in an area more often referred to as Kauri Point. This danger area is active 24 hours a day.

Outside Whenuapai Tower hours of service, the Whenuapai MBZ is active, and pilots must listen out and broadcast their intentions on 134.5 MHz. Also see the AIP supplements for updated information.

See the Whenuapai aerodrome section, page 58, for further details.

**VFR Transit Lanes**

VFR transit lanes are part of a CTR and are released as Class G (uncontrolled airspace) during daylight hours only. They allow VFR aircraft to transit through the edge of a CTR without obtaining an ATC (air traffic control) clearance.

Note: The upper limit of some VFR transit lanes may be significantly lower than the upper limit of their associated CTR.

There are two VFR transit lanes in the area:

**Whangaparaoa**

Extending from the surface to 1000 feet, this transit lane allows north and southbound traffic a more direct track through the Whenuapai CTR seaward of the east coast and to remain within gliding distance of land. It is particularly useful for pilots wanting to get in or out of North Shore aerodrome. Note that its upper limit is only 1000 feet. It is recommended that pilots transmit their intentions to “City Traffic” on 120.4 MHz before entering the transit lane. All traffic should keep right and make position reports on 120.4 MHz, except that northbound traffic should change to North Shore 118.0 MHz and call before reaching the Okura River Mouth.

**Te Henga**

Extending from the surface to 1500 feet, the Te Henga transit lane is a 2 NM wide corridor that allows aircraft transiting along the west coast to fly a more direct track and remain within gliding distance of land.

**Special Use Airspace**

*Mandatory broadcast zones*

Flying within an MBZ requires the pilot to maintain a thorough lookout and listening watch on the promulgated frequency at all times. Position and intention reports must be made on entry, and at regular (5 or 10 minute) intervals when operating within an MBZ. If fitted, landing or anti-collision lights must be ON as an added safety measure. Non-radio equipped (NORDO) aircraft are not permitted to operate within an MBZ unless another party can broadcast their position and intentions on their behalf.

There are six MBZs in the Auckland area:
**Parakai**
Extending from the surface to 2500 feet, and is an approximately circular MBZ (3 NM radius). Parakai MBZ caters for extensive parachute operations immediately adjacent to Parakai aerodrome. Position reports are required every 5 minutes on 123.5 MHz.

**Ardmore**
Extending from the surface to lowest level of controlled airspace (LLCA), this MBZ is New Zealand’s busiest. Slightly off-centre with respect to Ardmore Aerodrome, it has a diameter of approximately 5 NM only, which often means high traffic densities. It is particularly important that aircraft remain clear of the Auckland CTR boundary (1500 feet and below) to the north and west of the MBZ, as it is only 2 NM from Ardmore Aerodrome. Infringing this boundary could put an aircraft into the path of an aircraft arriving to or departing from Auckland Aerodrome. Itinerant pilots, in particular, need to be familiar with Ardmore’s local procedures before flying there. Position reports must be made every five minutes on 118.1 MHz.

**Mercer**
Extending from the surface to 4500 feet, this approximately rectangular (8 by 4 NM) MBZ lies between State Highway 2 and the southern boundary of the Ardmore GAA. Mercer aerodrome is situated within it. Operations at Mercer aerodrome include general aviation, some gliding, RPAS operations (drones), model aircraft activity, some parachuting, with aerobatic flying nearby. Position reports are required every 10 minutes on 133.05 MHz.

**Auckland City**
Extending from the surface to 2500 feet (transponder mandatory above 1500 feet), Auckland City MBZ caters for general operations over the city centre. Sandwiched between the Auckland and Whenuapai CTRs, the lateral boundaries extend west into the Waitakere Ranges, and east to Musick Point and Howick.
Operations within the MBZ are many and varied: hospital transfers from three heliports, police surveillance, traffic reporting operations, city scenic flights, and north/south transiting traffic. Maintaining an awareness of the position, type and intentions of this traffic is important.

Position reports should be made on 120.4 MHz every 10 minutes.

**Note:** that the airspace in the vicinity of Musick Point can get very busy when north/south traffic meets Great Barrier and Waiheke Island traffic. Because of this cross flow, the risks of a mid-air collision are increased, and extra vigilance is required.

**Note:** Mechanics Bay Heliport generates a significant amount of traffic. Be particularly aware of arriving and departing traffic in this area.

**Pike’s Point Heliport** is located in the Auckland City MBZ close to the northern side of the Auckland CTR, and east of Mangere Bridge VRP. The heliport is used for both VFR and IFR helicopter operations.

**Whenuapai**

Outside Whenuapai Tower hours of service, Whenuapai CTR becomes an MBZ. The airspace designated as the Te Henga VFR transit lane and Whangaparaoa VFR transit lane is excluded.

The 120.4 MHz is also used for position reports in the Whangaparaoa VFR transit lane.

**Great Barrier**

Extending from the surface to 4500 feet, this (up to) 25 NM wide corridor provides an increased level of safety for the numerous aircraft (nine or more scheduled commercial return trips per day) shuttling back and forth between the island and Auckland, or North Shore. Because of this traffic, it is essential that pilots make regular position reports on 124.4 MHz.

**Common frequency zones**

CFZs are designed to encourage VFR pilots to maintain a continuous listening watch and make regular position reports on the promulgated frequency. While this is not mandatory, it is good airmanship to treat a CFZ the same as an MBZ because of the often high densities of traffic.

There are three CFZs in the Auckland area:

**Ardmore**

Extending from the surface to the lower level of controlled airspace, this CFZ shares its western boundary with the Auckland CTR, and the northern boundary is along the southern edge of the Hauraki Gulf CFZ.
The eastern boundary adjoins the peninsular CFZ and the south western boundary is along the northern and eastern boundaries of the Ardmore MBZ. This can be a busy area as it is between Ardmore and the Hauraki CFZ. Pilots should be aware of the variations to the upper limit due to the three different lower levels of controlled airspace. It is recommended that pilots maintain a good look-out and make regular position reports to “Ardmore traffic” on 118.1 MHz when flying within the CFZ.

**Hauraki Gulf**

Extending from the surface to 2500 feet, this CFZ is designed to provide a common frequency for the area immediately to the northeast of Auckland City where north/south traffic may conflict with traffic transiting between Great Barrier and Waiheke Islands. Because of this cross flow, the risk of a mid-air collision is increased. This can be a very busy area, with aircraft heading in all directions. It is recommended that pilots maintain a good lookout and make regular position reports to “Hauraki Traffic” on 120.4 MHz when flying within the CFZ.
**North Shore**

Extending from the surface to 2500 feet, this CFZ has the same western and northern lateral boundaries as the North Shore GAA. The southern boundary is also common to both, but extends eastward beyond the GAA to west of the Whangaparaoa Peninsula.

As well as providing an increased level of awareness for North Shore circuit traffic, the CFZ is intended to encourage aircraft using the North Shore GAA, and pilots of transiting aircraft, to communicate on a common frequency. North Shore can be a busy aerodrome – especially over the weekends – so familiarity with local procedures, a good lookout, and regular position reports to “North Shore Traffic” on 118.0 MHz are a must.

**Danger areas**

A danger area should be entered only after due consideration has been given to the risk. We suggest staying out of them unless you absolutely need to be there.

There are more than a dozen danger areas in the Auckland region. They range in size from 0.5 NM to 5 NM across, and cater for activities such as glider winch-launching, model aircraft flying, live firing, and military operations. Other hazards include blasting, explosive storage, and jet efflux. Refer to the ENR section of *AIP New Zealand*, Vol 1 for details.

**Military operating areas**

An entry clearance is required from the designated administering authority (this may be by RTF, telephone, or other acceptable means) before entering a MOA.

There are two MOAs to be aware of in the immediate Auckland area:

**Whenuapai**

Extending from the surface to 2500 feet in a 3 NM radius around Whenuapai Aerodrome, this MOA accommodates military activities such as live firing, parachuting, and heavy aircraft circuit training. All civilian aircraft require prior approval through Base Operations Tel (09) 417-7442, before entering the MOA. It is active 24 hours a day.

**Ardmore MOA**

Pilots of aircraft arriving at Ardmore from the south, or departing in that direction, should take extra care to avoid the MOA, because of its close proximity (1.5 NM southeast) to the aerodrome.

Extending from the surface to 2300 feet and situated 2 NM east of Papakura town, this MOA is designated M201. Primarily for live firing but other military activity may take place, including RPAS operations (drones). It is active 24 hours a day.

Two other MOAs are described in the Parakai section of this booklet.
General Aviation Areas

GAAs are sections of controlled airspace that are released to Class G airspace during daylight hours only, to facilitate activities such as gliding and powered flight training.

There are three types of GAA, each of which has different activation criteria – refer to the ENR section of AIP New Zealand, Vol 1 for details. The SSR transponder code appropriate to the category of aircraft, ie, 1300 for gliders, 1400 for powered aircraft (by definition, aeroplanes and helicopters) in GAAs, should be set before entering a GAA. Radio calls on entry and exit should be made, and a continuous listening watch on the appropriate frequency maintained.

There are eight GAAs in the Auckland area:

Moir Hill

Is a small GAA, above the northern part of North Shore GAA from east of the railway line north of Ahuroa township, south of Pohuehue township to the coastline where it intercepts the 20 NM Whenuapai arc. Moir Hill GAA extends from 3500 to 4500 feet and is primarily used by hang gliders and paragliders. It is available for use with prior ATC approval (Auckland Approach, 124.3 MHz).

Ardmore

Located to the southeast of the Ardmore MBZ and extending 4 NM south of Mercer aerodrome on a 25 NM arc from Auckland aerodrome, the Ardmore GAA is divided into two sections by a boundary between Upper Mangatawhiri Reservoir through the State Highway 1 Bombay summit to south of Pukekohe. The lower level for both portions is 2500 feet. The northern portion has an upper limit of 3500 feet and the southern portion has an upper limit of 4500 feet, allowing aircraft to step up another 1000 feet without a clearance. It is permanently active during daylight hours.

Pilots should monitor 118.1 MHz (or 133.05 MHz if within the Mercer MBZ) when operating within the Ardmore GAA. There may be NORDO traffic operating in the GAA, as well as gliders listening out on the ‘universal’ gliding frequency of 133.55 MHz. It is also the busiest GAA in the country, so extra vigilance is essential.

Hobsonville

This is a small triangular shaped GAA located between the southern boundary of Whenuapai GAA and overhead NZWP and is available for use with prior ATC approval (Auckland Approach, 124.3 MHz).

Waitoki

Located above the Woodhill, Whenuapai and North Shore GAA; Waitoki GAA extends from 3500 feet to 4500 feet and is activated by prior ATC approval (Auckland Approach, 124.3 MHz).
**Hunua**

Located above the northern portion of the Ardmore GAA and having the same lateral boundaries, Hunua GAA extends from 3500 to 4500 feet and can be activated with the prior approval of Auckland Approach (contact via Christchurch Information by telephone, or frequency 118.5 MHz). It is used mainly by glider pilots. Gliders operating adjacent to Drury will listen out on the “Drury Traffic” 134.45 MHz frequency for flight following reasons. Gliders in transit to the south on cross country will operate on the glider chatter frequency 133.55 MHz. It is not available when Runway 05R is in use at Auckland, or when the cloudbase at Ardmore is less than 4000 feet. Ardmore UNICOM must also be on watch (this is a condition of release by ATC).

**Caution:** Do not enter this GAA unless you are absolutely certain that it has been activated – this will be notified on the Ardmore AWIB, 121.0 MHz. If not, it is controlled airspace, and is transited by IFR traffic on approach to Runway 23L or on departure from Runway 05R at Auckland. In past years there have been several instances of near-misses between IFR aircraft and unauthorised VFR traffic (without operating transponders) in the CTA, which had not been released as a GAA at the time.

**Whenuapai**

Whenuapai GAA is located to the north of the aerodrome, and abuts the North Shore GAA. It extends from 2500 to 3500 feet, and is available for use with prior ATC approval (Auckland Approach, 124.3 MHz).

**North Shore**

Located to the north of North Shore Aerodrome, and extending from 2500 to 3500 feet, this GAA is permanently active during daylight hours. Pilots should monitor North Shore Traffic on 118.0 MHz when within the GAA.

**Woodhill**

This GAA covers the area between the western border of the Whenuapai GAA and the West Coast. It is available for use during daylight hours with prior ATC approval (Auckland Approach, 124.3 MHz).

---

**Transponder Mandatory Airspace**

All controlled airspace is transponder mandatory (TM). The Auckland City MBZ between 1500 feet and 2500 feet is also transponder mandatory.

TM airspace is used by ATC to provide a surveillance control service.

It also permits ACAS equipped aircraft to ‘see’ other traffic, and take avoiding action if required. Pilots should make sure their aircraft transponder is set to ALT mode when operating within TM airspace. It is good practice to have the transponder on ALT mode at all times.

---

**ACAS has detected traffic in the 10 o’clock position, shown by the blue diamond.**
Aerodromes

Ardmore  AR

General

With over 10,000 movements per month, Ardmore is one of New Zealand’s busiest aerodromes. Operating seven days a week, Ardmore is home to at least five flight-training organisations (fixed-wing and helicopter), an extensive warbirds collection, business jets, light twins, and numerous privately owned aircraft. Because of this wide mix of aircraft types (with vastly different performance characteristics), and the often very high traffic densities, being thoroughly familiar with local procedures is extremely important – especially for itinerant pilots.


Ardmore Aerodrome looking to the west. This viewpoint is looking down the disused runway.
Ardmore

Airspace south of Ardmore viewed from the south

Note: For reasons of clarity, not all airspace features have been shown.

Base maps from NzTOPO Online, extracted March 2004, Crown Copyright Reserved.
Radio Procedures

Ardmore aerodrome has a UNICOM facility (see sidebar) operated by the airport company. It operates on 118.1 MHz, which is also the unattended aerodrome frequency outside UNICOM hours. UNICOM operates daily from 08:00 to 18:00 local time.

A high standard of radio work is needed to maintain an incident-free traffic flow in and around Ardmore. Pilots sometimes talk too quickly in an effort to minimise transmission time. This can result in confusion, causing other pilots or the UNICOM operator to request clarification, tying up the frequency. Be especially considerate of the large number of foreign students training at Ardmore, for whom English is not their first language.

Taxi calls are not required, in order to minimise radio congestion. A broadcast with callsign and intentions is required before entering the runway in use, however.

Pilots flying high-performance aircraft (or very slow aircraft) should state their aircraft type – using its common name, not the aircraft designator. For instance, “Navajo” or “Chieftain” should be used instead of “PA-31”, as few student pilots would know what a PA-31 was, and therefore may not adjust their circuit spacing accordingly.

Pilots are encouraged to call turning final to make it easier to identify them.

Training areas

Extensive flight training takes place to the south of the aerodrome in the Ardmore and Hunua GAAs. Refer to “General Aviation Areas,” page 13, for their operational requirements. When the cloud base permits, traffic is encouraged to establish a flow pattern to and from these training areas – refer to the Ardmore arrival/departure sections for details.

Be aware of extensive operations at Pukekohe East airstrip, a private airstrip located 2.5 NM northeast of Pukekohe township on Runciman Road. This airstrip is not marked on the VNC but is a popular location for forced-landing training.

Topdressing aircraft, gliders, microlights, and NORDO aircraft also use the airstrip. Broadcast on, and monitor, 119.1 MHz when operating in the vicinity.

Special Use Airspace

Low flying zones

Pilots are required to report on 118.1 MHz prior to entering the low flying zone (Wairoa River, East Auckland), and again on exit. This frequency should be monitored while operating within the LFZ. The using agency further advises that normally, only one aircraft at a time is permitted to operate in the LFZ, but two aircraft may operate there, provided that each aircraft has a flight instructor on board.
**UNICOM** is an acronym derived from the US term “**Universal Com**munications,” and in New Zealand is:

» an air/ground communications service, that may be provided at aerodromes with no aerodrome control or aerodrome flight information service, to enhance the value of information normally available at an uncontrolled aerodrome;

» a service for passing on limited information to pilots, and other persons on the surface, in the locality of an aerodrome;

» not an air traffic service and cannot provide traffic information;

» a service that may, on request, provide the general position of aircraft the operator has received reports from, but the operator may not interpret or analyse the information for a pilot.

**Danger areas and MOAs**

Beware of the following danger areas and MOAs in the vicinity of Ardmore:

» Karaka danger area – Surface to 1000 feet, model aircraft flying.

» Drury danger area – Surface to 2500 feet, glider winch-launching. Refer to the Drury section, page 36, for details.

» Bombay danger area – Surface to 1800 feet, civil blasting.

» Ardmore MOA – Surface to 2300 feet, live firing and other military activity adjacent to the Ardmore circuit. Refer to “Military Operating Areas”, page 12, for details. Note that the Ardmore MOA is permanently active, and its status is not broadcast on the Ardmore AWIB.

**Arrivals**

It is vital that all pilots joining Ardmore thoroughly understand and follow the arrival procedures published in *AIP New Zealand*, Vol 4 – especially if you are new to the area.

**General**

» Obtain and fully understand the AWIB broadcast on 121.0 MHz well before entering the MBZ.

» Review the published arrival procedure as soon as the runway in use is known. Joining long final is not recommended. **Note:** Aircraft joining, including IFR aircraft, are required to give priority to aircraft in the circuit. If fitted, ensure that landing lights or anti-collision lights are ON.

» Call joining before entering the MBZ, and clearly state aircraft type, position (relative to the nearest published VRP), altitude, and joining intentions. Listen for automatic ‘beep-back’ confirming your transmission on 118.1 MHz. If you are unfamiliar with the area, tell the UNICOM operator when you make your initial joining call, and join via a standard overhead joining procedure.
Check your DI when on final to confirm that you are, in fact, on approach for the correct runway – a number of pilots have been confused and attempted to land on Taxiway Juliet (old Runway 07/25) when they thought they were established on final for Runway 03/21.

» Be aware that gliders operating within the Drury circuit do NOT normally listen on 118.1 MHz.

» If traffic density is high, a standard overhead join is recommended. Listen to establish traffic density before making this decision.

» Aircraft joining overhead need to be aware that the helicopter circuit is flown at 800 feet by day on the non-traffic side of the fixed-wing circuit in use. Fixed-wing aircraft must not descend below 1100 feet on the non-traffic side and should make a “descending on the non-traffic side” radio call.

» Non-standard (ie, incorrect direction or height) circuits or joining procedures are not permitted.

» Helicopters should join via the published arrival/departure low-level sectors, or via the TLOF (touchdown and lift-off area) circuit on the non-traffic side not above 800 feet. Helicopters joining via the fixed-wing circuit must conform to the fixed-wing circuit, including altitude and minimum speed requirements. Refer to AIP New Zealand, Vol 4.

**Runway 03 Arrivals**

If the circuit is busy, join overhead.

**From the west or south via Drury**

This is the preferred arrival from the Ardmore GAA. Track west of Drury via west Papakura (track between Papakura VRP and Karaka (sale yards) VRP), at 1100 feet to join on a wide right base. Call joining at or before Drury. Give way to traffic established in the circuit; be prepared to track onto the non-traffic side not below 1100 feet; take the grass runway (check length), or go around. Be very aware of gliders operating from Drury Aerodrome. Winch launches can be as high as 2000 feet, with climb rates exceeding 4000 ft/min.
From the south or east via Hunua
Track east of Waterworks from Hunua towards Clevedon between the two sets of power lines, at 1600 feet. Passing east of Waterworks, descend to 1100 feet. Continue tracking north and then turn left to join downwind. Give way to circuit traffic climbing crosswind.

Alternatively, join overhead at 1600 feet. Call joining at or before Hunua. Do not join downwind via Waterworks, as this conflicts with outbound traffic.

From the northeast via Clevedon
From Clevedon, track wide of the crosswind leg to join downwind at 1100 feet. Call joining at or before Clevedon, and call again passing Waterworks joining downwind. If the circuit is busy, join from Clevedon and track towards Waterworks. Once inside the MBZ, and where the lower level of controlled airspace permits, climb to 1600 feet and join overhead.

From the North via Brookby
Track via Brookby, towards Clevedon at 1100 feet to join downwind. Call joining before passing Brookby. Track to a point on the non-traffic side of Runway 03 at 1100 feet, that will allow you to cross safely to the downwind via the Runway 03 upwind threshold. Look out for helicopters operating at up to 800 feet in the Tower TLOF. Do not descend below 1100 feet on the non-traffic side.

From Auckland CTR
If traffic density is high, or you are unfamiliar with Ardmore, a standard overhead rejoin is recommended.
Runway 21 Arrivals

If the circuit is busy, join overhead.

From the east and south via Hunua

This is the preferred arrival from the Ardmore GAA, weather permitting.

From Hunua, track east of Waterworks towards Clevedon between the two sets of power lines at 1600 feet. Passing east of Waterworks, descend to 1100 feet to join on a wide left base. Look out for traffic on late downwind for Runway 21. Alternatively, join overhead at 1600 feet. Call joining at or before Hunua and again on left base passing east of Waterworks.

From the west via Drury

Track via Drury towards Papakura. After passing just east of Papakura, turn right to join downwind at 1100 feet, or join overhead at 1600 feet. Give way to traffic climbing crosswind. Call joining at or before Drury. Look out for glider traffic in the vicinity of Drury.

Note: Do not join downwind via Red Hill, as this could conflict with crosswind traffic and does not conform to the circuit pattern.

Aircraft should track parallel to Runway 21 with wings level prior to reaching the crosswind leg, in order to minimise blind spots.

From the northeast via Clevedon

Track to Clevedon, join via the non-traffic side not below 1100 feet, and cross the Runway 21 upwind threshold to join downwind.
Local Operations

The following sections look at various aspects of local operations in and around Ardmore Aerodrome. It is intended to help aerodrome users standardise their operations.

Ground movements

» The holding point area for Runway 03 often becomes congested. With the exception of aircraft from Ardmore Flying School, it is recommended that engine run-ups and pre-takeoff checks be completed elsewhere to help ease this congestion.

» After landing, aircraft should vacate the sealed runway as soon as possible. Do not roll ahead to the next sealed taxiway unless your aircraft has a propeller clearance problem. Rather, expedite over the grass at a 45-degree angle to the southern sealed taxiway. But be sure to control your speed first.

» The pilot of an aircraft on short final must not pressure a preceding pilot to vacate the runway prematurely – go around if spacing is insufficient.

» There is limited space for aircraft to pass on the southern taxiway, so it may be necessary to pull to one side, and hold, to enable other aircraft to pass. Beware of the drainage ditch on the southern side of the taxiway.

» Aircraft on the southern taxiway must give way to aircraft exiting the sealed runway at Taxiway Alpha.

From the north

Tracking to the east of the golf course just south of Whitford Town and then following Whitford Park Road below 1500 feet will keep you clear of the Auckland CTR as well as the control area above. Call joining before passing Brookby. Track at 1100 feet to a point on the non-traffic side of Runway 21 that will allow you to cross safely to the downwind leg via the Runway 21 upwind threshold. Look out for helicopters operating at up to 800 feet in the Tower TLOF. Do not descend below 1100 feet on the non-traffic side.

From Auckland CTR

Call joining prior to entering the Ardmore MBZ. If the circuit is busy join via the non-traffic side at 1100 feet, cross the Runway 21 upwind threshold to turn downwind.
See the Ardmore Ground Movements chart in *AIP New Zealand, Vol 4* for more detail.

**Circuit Procedures**

**General**

» Peak traffic flows occur between 08:00 and 18:00 local time.

» Be prepared to adjust your speed to maintain safe circuit spacing.

» Low-level circuits and orbits within the circuit are not permitted.

» Aircraft must be established on the runway centreline at or above 600 feet. This includes glide approaches.

» Pilots simulating engine failures after takeoff must not descend below 400 feet, and the exercise must be contained within the approach fan.

» Pilots taking off or going around must climb to 600 feet before turning crosswind (refer to go-around procedure below).

» High-performance aircraft taking off need to watch for aircraft joining overhead, particularly as they cross the upwind threshold of the runway in use.

» Aircraft departing, or landing behind heavy or high-performance aircraft, need to be aware of, and apply, adequate wake turbulence separation. Be aware also of rotor wash from helicopters.

» If you elect to use either grass runway, be certain that it meets the performance requirements of your aircraft.

» Disused sealed Runway 07/25 is redesignated as Taxiway Juliet. It must not be used as a runway.

» Jet aircraft or large twins need to keep their time at the holding point to a minimum because of IFR clearance requirements and high operating costs. If possible, please help to expedite their departure by letting them go first.

» Priority should be given to high-performance aircraft, warbirds, air transport aircraft, and air ambulance aircraft. Give way, extend downwind, go around, or use the grass runway if available. High-performance aircraft will often extend downwind for spacing reasons, or join long final. Maintain a good lookout to ensure that you do not turn base or final, inside or in front of them.

We all know what it is like to wait seemingly forever at the holding point for a takeoff slot. If several aircraft are waiting at the holding point, airborne pilots can show them some consideration by extending downwind, taking the grass, or practising a go-around – the courtesy and good airmanship will be appreciated.
Parallel operations

Parallel grass/seal circuit operations need considerable care at a busy aerodrome like Ardmore. Consider the following points:

» Parallel operations are permitted only for aircraft of 2700 kg or less.

» Simultaneous use of the 07/25 grass circuit and 03/21 circuit is not permitted.

» Aircraft airborne off the grass need to ensure they maintain separation with aircraft airborne off the sealed runway, particularly before turning crosswind.

» Grass Runway 07/25 infringes the Helicopter TLOF, so fixed-wing aircraft must give way to helicopter traffic. Contact UNICOM prior to using 07/25 grass, and they will notify the helicopter traffic of the need to change runways. (Make radio contact with the helicopter traffic if wishing to use 07/25 grass outside of UNICOM hours of service.) Aircraft should either hold clear of the circuit area, or remain in the 03/21 circuit until a runway change is possible.

» Simultaneous takeoffs and landings during banner pickup and drop-off are not permitted because of the decreased lateral separation involved. (Banners are picked up and dropped off from the strip of grass between the sealed and grass runways.)

Go-arounds

Go-arounds at Ardmore are quite common because of the closely spaced nature of circuit traffic. The following points need to be considered:

» During a go-around off sealed Runway 21, aircraft should ease to the left away from traffic in the 21 grass circuit. Likewise, aircraft going around off 03 seal
should ease slightly to the right; ie, to the south of the main runway, then track parallel to the runway heading, and climb to 600 feet before turning crosswind.

» Aircraft going around off 03/21 seal need to watch out for helicopters lifting off or approaching the southeast apron and southern aiming point in front of the NZ Warbirds hangar.

» When going around off the grass runway approach, track to maintain the centreline because of the proximity of the sealed runway and Helicopter TLOF on either side.

» If a go-around from the base leg is required (eg, as a result of poor circuit spacing), climb to 1100 feet, cross the extended runway centreline, track to the non-traffic side, broadcast your intentions, and carry out a standard overhead join for the same runway. Look and listen out for other aircraft joining overhead.

Runway closure
If, in the event of an emergency, Runway 03/21 is obstructed, the aerodrome may temporarily close. In this event, airborne aircraft need to hold clear of the circuit until the runway is readied for use. The UNICOM operator will provide regular updates. If fuel reserves do not permit an extended hold, pilots should divert to another aerodrome. The airport company may make Runway 03/21 grass or Runway 07/25 grass available as an alternative for aircraft whose performance permits the use of the grass vectors. Even under these circumstances, Taxiway Juliet is not to be used as a runway.

Night operations
Extensive night training takes place in the Ardmore circuit and surrounding area, especially during fine-weather periods. At night remember that:

» Circuit height is increased by 200 feet to 1300 feet.

» A night curfew applies – refer to the Ardmore Airport Operations Manual, which includes noise abatement procedures, available on www.nzar.co.nz.

» The Ardmore GAA is disestablished.

» Fog can form very quickly at Ardmore. Monitor the temperature and dewpoint closely – particularly if you are vacating the circuit for an extended period.

» Helicopters sometimes operate in the fixed-wing circuit at night. Their navigation lights are closer together than on an aeroplane, which may give the illusion that they are further away than they actually are. They also tend to fly a tighter circuit and are likely to be travelling at slower speeds downwind; eg, 70 knots.

» Helicopters may also be practising steep autorotational descents to the runway threshold, and will often come to a hover before vacating the runway.
**Helicopter Training**

The following section is designed to increase helicopter and fixed-wing pilots’ awareness of the way the other operates.

**Fixed-wing pilots**

» Any registration callsign beginning with Hotel or India is a helicopter – the rare exception being foreign-registered helicopters.

» There is often extensive helicopter activity on the non-traffic side. Maintain a thorough lookout and listening watch when joining overhead. Do not descend below 1100 feet.

» When taxiing on Juliet or the western end of Golf or Hotel, give way to helicopters taking off or landing. Stop and wait until you are sure it is clear before continuing.

» Be careful of helicopter traffic using the centre-grass area when taxiing clear of either grass runway. Taxi with caution through the centre-grass area – the helicopter TLOF squares may be difficult to see if the grass is long.

**Helicopter pilots**

» Fly ‘friendly’ by keeping clear of surrounding houses, orchards, etc. Climb early and descend late with respect to the aerodrome boundary. Maintain 600 to 800 feet, and stay within the Arrival/Departure Sectors, until the aerodrome boundary. In the designated descent segment (Northern Sector), maintain not below 300 feet within 250 metres of the boundary. Refer *AIP New Zealand*, Vol 4. Include your altitude passing when making a departure radio call – rather than just “vacating low level”.

» Exercise caution when joining overhead (eg, to practise an autorotation), and give way to fixed-wing aircraft. Liaise with UNICOM to confirm if any other aircraft have reported joining overhead. Always maintain a good lookout and listening watch for other aircraft as UNICOM may not know about them.

» Listen out for TLOF calls and, if possible, give way to autorotations.

» Pilots wishing to operate in the fixed-wing circuit, day or night, must comply with the fixed-wing circuit altitude and pattern – no non-standard patterns are permitted.

» Be aware of aeroplanes going around off 03/21 seal above the southern aiming point and south eastern apron if you are arriving or departing via the southeast or southwest sectors.

» Landings are not permitted in the low flying zone.
Departures

It is vital that all pilots departing Ardmore thoroughly understand and follow the departure procedures published in AIP New Zealand, Vol 4 for the runway in use – especially if they are new to the area.

General

» Obtain and fully understand the AWIB broadcast on 121.0 MHz before taxiing.

» Change to 118.1 MHz and confirm the runway in use. Brief the applicable published departure procedure.

» Broadcast departure intentions and turn on landing lights and anti-collision lights just before entering the runway in use. Listen for automatic ‘beep-back’ confirming your transmission on 118.1 MHz.

» Be aware that gliders operating within the Drury circuit do not normally listen out on 118.1 MHz.

Runway 03 Departure

To the south via Hunua

This is the preferred departure to the Ardmore GAA, weather permitting.

Depart via the crosswind leg, track overhead Waterworks (climb to 1500 feet once clear of the circuit) and vacate directly to the south or to Hunua, remaining west of the westernmost set of powerlines. Call vacating when clear of the MBZ.

To the west (and alternate route south in poor weather)

Depart via the downwind leg, Red Hill and follow the railway line to a point just east of Drury (climb to 1500 feet once clear of the circuit and call vacating when clear of the MBZ). Look out for traffic joining right base for Runway 03 and glider winch-launching at Drury aerodrome.

To the northeast via Clevedon

Climb straight ahead to Clevedon and call vacating the MBZ. Look out for aircraft tracking north/south outside the eastern edge of the MBZ.
To the north
Climb straight ahead to 1100 feet to vacate east of Brookby, remaining clear of the eastern boundary of the Auckland CTR, and below the Auckland CTA. Tracking via Whitford Park Road then to the east of the Whitford golf course not above 1500 feet will achieve this, but note that Whitford Town is very close to the CTR boundary. Call vacating the MBZ and change to 120.4 MHz entering the Hauraki Gulf CFZ.

To Auckland CTR
Depart downwind right-hand Runway 03. Left turns after takeoff are not permitted. Hold clear of Auckland CTR until cleared to enter by the tower. Monitor Ardmore 118.1 MHz until clear of the MBZ. Refer to the Auckland section, page 31, for details on Auckland arrival procedures.

Runway 21 Departure

To the south and west via Drury
This is the preferred departure to the Ardmore GAA.
Maintain the runway centreline until crossing the railway line (climb to 1500 feet once clear of the circuit), turn left and track between Papakura and Karaka (sale yards). Call vacating once clear of the MBZ, and track to the west of Drury. Look out for glider traffic in the vicinity of Drury.

To the south and east via Red Hill (alternate route)
Depart via the crosswind leg, tracking southeast between the Papakura MOA and Drury danger area, climb to at least 1500 feet passing Red Hill. Aircraft with poor climb performance, especially in a westerly wind, unable to climb to 1500 feet before Red Hill, should depart either to the south
via Drury or to the east via the downwind leg to Clevedon.

**Note:** Avoid vacating east via Waterworks because of possible conflict with traffic inbound from Hunua. Call clear of the MBZ.

**To the northeast via Clevedon**
Depart via the downwind leg and track to Clevedon at 1100 feet. Look out for traffic joining on a left base from east of Waterworks, and call vacating once clear of the MBZ. Also be aware of aircraft tracking north/south outside the eastern edge of the Ardmore MBZ.

**To the north**
Depart via the end of the downwind leg at 1100 feet to east of Brookby. Look out for traffic joining left base from Waterworks and long final from Clevedon. Right turns after takeoff are not permitted. Remain clear of the eastern boundary of the Auckland CTR, and below the Auckland CTA. Tracking via Whitford Park Road then to the east of the Whitford golf course not above 1500 feet will achieve this, but note that Whitford Town is right on the CTR boundary. Call vacating once clear of the MBZ.

**To Auckland CTR**
Depart towards Karaka (sale yards). Hold clear of Auckland CTR until cleared to enter by the Tower. Monitor Ardmore 118.1 MHz until clear of the MBZ.
Auckland (NZAA) is a busy international airport – about 95 per cent of its traffic is IFR air transport. Non-scheduled operations by general aviation aircraft require specific written permission from the airport company, and the use of an authorised ground handler (see AIP New Zealand, Vol 1, NZAA Table AD 2.4).

Because of the often very high traffic densities, itinerant pilots intending to use NZAA must make themselves thoroughly familiar with the arrival, departure, and ground movement procedures depicted in AIP, Vol 4, before flying there. Being well prepared, with a good knowledge of these procedures, will help to ensure smooth traffic flows and keep delays to a minimum. Listen carefully to ATC instructions and if in doubt, ask.

As the majority of aircraft operating in and out of Auckland are of the medium, heavy, or A380 category, wake turbulence is a real concern. Light aircraft are particularly susceptible to wake turbulence, so a good knowledge of how to avoid it is essential.

Auckland International Airport looking towards Runway 23L.
Local Operations

Arrivals

This section describes the preferred arrival routes to Auckland aerodrome.

As per the AIP, prior to departure, VFR aircraft are required to submit a local VFR flight notification via IFIS.

Before entering the CTR, call Auckland Tower on 118.7 MHz and give an abbreviated position report (callsign, position relative to a VRP, and altitude). After receiving your arrival instructions, follow the assigned arrival procedure (VFR Arrival Procedures – All Runways are listed below), and comply with any further instructions Tower may give you. A clearance to enter the CTR and join directly is sometimes issued.

Note:

- The cleared altitude is always given when direct clearances are issued.
- Although controllers issue clearances at 1500 feet or below, especially for aircraft to the north of the aerodrome, pilots are still responsible for conforming to minimum safe heights over built-up areas (i.e., 1000 feet AGL).
- If a clearance is not available, remain outside the CTR.
- When arriving from the north, you need to be aware of the Otahuhu danger area, often referred to as the “Otara Power Station”.

Adjacent Airspace

Airspace adjacent to the Auckland CTR (Class C):

- Auckland City MBZ to the north.
- Ardmore MBZ to the east.
- Uncontrolled airspace to the east, west, and south.
- Auckland control areas overhead.

These areas of uncontrolled airspace adjacent to the Auckland CTR often have very high traffic densities. A diverse mix of aircraft types carry out a variety of activities – some examples are police surveillance, air ambulance, aerial photography, scheduled air transport, charter, and sightseeing flights.

It is essential, therefore, that pilots make themselves thoroughly familiar with the airspace boundaries (see VNCs), and with the requirements for the different types of airspace (MBZs, CFZs, etc). A high standard of radio work is also necessary when operating in these areas.

Note: Pike’s Point Heliport is located in the Auckland City MBZ close to the northern side of the Auckland CTR, and east of Mangere Bridge VRP. (Refer page 10)
Auckland
Airspace
South of Whenuapai viewed from the south

Base maps from NzTOPOOnline, extracted October 2003, Crown Copyright Reserved.

Note: For reasons of clarity, not all airspace features have been shown. eg, G276 Hunua and G275 Ardmore are not included in this diagram.
**Mangere Bridge arrival**

Track via Mangere Bridge to Mangere Town at 1500 feet or below, unless otherwise instructed. Hold right hand west of Mangere Town for joining instructions.

**Joining**

There is only one VFR arrival procedure, Mangere Bridge, at the time of publishing. Traffic patterns do not easily allow for VFR aircraft to join directly from the south, unless you require priority such as for a medical evacuation. In most instances, a clearance will be more readily available if you track around the control zone and request joining from the north.

**Holding**

Because of traffic priorities, ATC may have to hold light aircraft until a suitable arrival slot is available.

**Approach and landing**

The circuit height at Auckland is 1000 feet. Pilots are typically taught to fly square circuits and stable approaches at standard flight manual approach speeds with flap extended. Unfortunately, a light aircraft flying a 3 NM final at 70 knots is not compatible with turboprop and jet aircraft approaching at speeds of up to 200 knots. Controllers find it very difficult to achieve adequate runway separation with such large speed differentials. It is an ATC requirement that VFR aircraft in the circuit maintain an approach speed of not less than 90 knots IAS when above 300 feet. This often requires a degree of skill in order to be able to slow the aircraft to a suitable landing speed within the limited time available before landing. If you have any doubts about your ability to meet these requirements, then take the time to practise (with an instructor) at your home aerodrome before arriving at NZAA.

**Runway in use**

The Auckland runway is the southern strip of concrete designated Runway 05R/23L. See also *AIP New Zealand*, Vol 4, Auckland ‘White Pages’.

**Displaced Threshold Operations**

Periodically, Runway 05R or 23L may be shortened for urgent repairs. The effects are detailed in the table below.

<table>
<thead>
<tr>
<th>Runway</th>
<th>Closure</th>
<th>Effect</th>
<th>Touchdown Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>05R</td>
<td>Western end</td>
<td>Displaced threshold</td>
<td>Fly over the work and land at the displaced touchdown point.</td>
</tr>
<tr>
<td>05R</td>
<td>Eastern end</td>
<td>Runway shortened</td>
<td>Standard threshold and touchdown point.</td>
</tr>
<tr>
<td>23L</td>
<td>Western end</td>
<td>Runway shortened</td>
<td>Standard threshold and touchdown point.</td>
</tr>
<tr>
<td>23L</td>
<td>Eastern end</td>
<td>Displaced threshold</td>
<td>Fly over the work and land at the displaced touchdown point.</td>
</tr>
</tbody>
</table>

See also *AIP New Zealand*, Vol 4, Auckland ‘Yellow Pages’. 
Parking and ground movements

Runway occupancy time is an important issue at Auckland. Aim to touchdown to minimise any taxiing time on the runway, as you are expected to vacate via one of the centrally located taxiways (runway dependent) detailed in the NZAA ground movements page in the AIP, unless otherwise approved by ATC. Once clear of the runway, contact Ground on 121.9 MHz for taxi instructions.

Parking for light aircraft is extremely limited at the light aircraft parking area on the west side of Taxiway C4. Pilots and operators should refer to AD section (Auckland Ground Movements) AIP New Zealand, Vol 4 for comprehensive instructions. You should arrange parking before you arrive.
Overflights

Often the level of air transport traffic is such that overflights will be declined, and you will be instructed to remain clear of the Auckland CTR.

If an overflight is possible, Auckland Tower typically clears northbound aircraft wanting to overfly central Auckland via Seagrove and the LPG Terminal.

Southbound aircraft are usually cleared via the reverse route – Mangere Bridge, overhead the control tower, and possibly LPG Terminal and Seagrove.

Overflights are treated as if they are landing and taking off on a crossing runway. Therefore, aircraft crossing overhead are sequenced with arriving and departing aircraft on Runways 05R/23L. You may be instructed to pass behind aircraft on final with a cautionary note on wake turbulence. Sometimes routing may be adjusted with a requirement to cross over a particular runway threshold, depending on traffic.

Departures

See AIP New Zealand, Vol 4, “VFR Departure Procedures”. In all cases, report clear of the CTR, and Auckland Tower will advise when to change frequency.
Drury

**General**

The Drury glider aerodrome is located 1.5 NM east of Drury VRP. The reporting point is the motorway interchange on the southern side of Drury township. This is the reporting point used most often by aircraft departing southwards from Ardmore, or arriving from the south. Most aircraft coming and going from the Ardmore GAA also fly over, or near, Drury. Landing and anti-collision lights should be ON, and a sharp lookout is essential, while listening out on 118.1 MHz. Refer to the Ardmore section, page 15, for more detail.

**Airspace**

A danger area surrounds Drury glider aerodrome, in a 1 NM radius circle from the aerodrome centre and from the surface to 2500 feet. Gliders – some winch launched – and towplanes operate within this area on their own radio frequency, 134.45 MHz. The western limit of this danger area is just to the east of Drury VRP, so transiting aircraft should be careful to remain west of Drury.

Class C controlled airspace sits directly above Drury and extends from 3500 feet upwards. IFR aircraft to or from the Bay of Plenty area
often overfly Drury. VFR pilots are therefore well advised to maintain an adequate buffer below this controlled airspace and have transponder Mode C (ALT) selected.

**Local Operations**

At Drury glider aerodrome, launching is by aero-tow and by winch. The traffic circuit is to the west of the aerodrome, so it is left-hand for Runway 01 and right-hand for Runway 19. As with all glider operations, the circuit height varies, but it is generally 1000 feet AGL or below. The traffic frequency is 134.45 MHz.

Aero-tows to 2000 feet are commonly carried out over the ridge to the southeast of the aerodrome. When gliding is in progress, remain clear of this ridge. Just southeast of the field there is a quarry, over which gliders often ‘thermal’.

Winch launches can reach 2000 feet. These are very rapid, so don’t fly over the glider field below 2500 feet. The winch cable itself is a potential collision hazard, both during the launch and during the time it takes to fall to earth after release from the glider. It is virtually impossible to see in time to take avoiding action.

When approaching Drury, look over to the glider aerodrome to see if gliding is in progress. Remember – you have to give way to gliders, and towplanes with gliders in tow.
Great Barrier Island (NZGB) is a non-certificated aerodrome operated by Auckland Council and is situated 1 NM northeast of Claris on Great Barrier Island.

The aerodrome can get very busy, with a minimum of nine scheduled return airline flights each day, and often more frequently during summer, on weekends, and on public holidays. Great Barrier is also a very popular destination for private operators in the greater Auckland region. There is a mix of fast and medium speed aircraft using the aerodrome, mostly VFR, but there is some IFR traffic to and from Auckland and North Shore. The instrument approach tracks are depicted on the VNCs (B1 and C3).

Note: One approach commences 12.5 NM southeast of the aerodrome.

Because of the terrain, localised turbulence can be expected in moderate to strong winds. Appropriate joining procedures should be chosen with this in mind.

Airspace

NZGB lies within the Great Barrier MBZ. Radio calls on 124.4 MHz giving position, altitude, and intentions are mandatory when entering, and at intervals not exceeding 10 minutes when within the MBZ. Be aware of aircraft arriving controlled VFR or IFR, and descending into the MBZ around Channel Island.

Aircraft arriving from Auckland generally make an enroute position report at the Noises Islands before entering the MBZ, and again at Channel Island before joining at Great Barrier.
Arrivals

From the south
Join via the eastern side of the island for long final Runway 28, or downwind for Runway 10.

From the north
Join via Whangaparapara or Okiwi.

From Auckland or North Shore
When Runway 28 is in use, join via Tryphena Harbour or Blind Bay, which are both marked on the VNC.
When Runway 10 is in use, join via Whangaparapara or Blind Bay.

Departure
The IFR departure track is outbound on the 062 track (ie, a northeast track).

For VFR or IFR visual departures the following are recommended:
» Runway 10 – depart via Tryphena Harbour or the downwind leg.
» Runway 28 – depart via Whangaparapara.

There are no specific procedures for departing the local area once clear of the aerodrome circuit.
Kaipara Flats (NZKF) is a non-certificated aerodrome located 2 NM east of Kaipara Flats township and 3.5 NM west of Warkworth. A moderate amount of light aircraft activity takes place in and around the aerodrome. Hang gliding takes place occasionally from two nearby sites – Dark Summit, approximately 2.5 NM southeast of NZKF, and Moir Hill, a further 1.5 NM south – and more frequently from another site, known locally as “Dill Hill”, 7 NM southwest. All sites are marked on VNC D1 (1:125 000) with hang glider symbols. Hang gliders sometimes fly close to the Kaipara Flats circuit pattern, so a vigilant lookout is essential.

Airspace
NZKF is in uncontrolled Class G airspace below 4500 feet. Auckland’s controlled airspace sits above this. A danger area, East Kaipara Harbour, where model aircraft flying takes place from the surface to 1500 feet, is located approximately 7 NM west of the aerodrome.

Joining
As NZKF is an uncontrolled aerodrome, normal unattended aerodrome procedures apply.

From the south and east
From Warkworth, line up with the Kaipara Harbour entrance to the west, then proceed approximately 3 NM west until a large glasshouse is sighted. This glasshouse is in line with the final approach for Runway 25.

From the west
From Kaipara Flats township, proceed eastwards approximately 2.5 NM then join overhead for the runway in use.

From the north
From Springhill aerodrome (located about 4 NM north of NZKF), proceed south, then join overhead for the runway in use.

Circuit Procedures
The runway at NZKF is designated 07/25. All circuits are to the south of the aerodrome – the circuit direction is right-hand for Runway 07 and left-hand for Runway 25.
Kaipara Flats Aerodrome. Glasshouse in foreground.

Warkworth looking west towards Kaipara Flats.
Mercer (NZME) is a privately owned aerodrome, located 6 NM southeast of the Bombay Hills and 3.5 NM northeast of Mercer township. It blends in with surrounding farmland and can be difficult to locate if you are unfamiliar with the area. Look for the bright orange hangars.

Aircraft approaching with the intention of landing or operating in the NZME circuit should listen to the Mercer AWIB (the AWIB is activated by transmitting four times within three seconds on 133.05 MHz) to find out if parachuting is in progress. When approaching from the north, call passing the Bombay Hills, and when approaching from the south, call abeam Meremere.

Aircraft transiting to or from Ardmore do not need to be on Mercer frequency unless they enter the MBZ. It is recommended that aircraft transiting north or south follow State Highway 1 (keeping it on the left) between Huntly and the Bombay Hills interchange. If you do have a second radio, listening out on the Mercer MBZ frequency is a sensible precaution, as there may be MBZ traffic in quite close proximity to your transit route.

Commercial parachuting and parachute training occurs at Mercer. Some flight training takes place at NZME, with students ranging in experience from ab initio through to CPL level. Model aircraft operate from the mown area close to the threshold of Runway 27, abeam the eastern hangars.

Runway 09 approach at Mercer aerodrome.
**Parachuting Operations**

A PLA is located on the aerodrome. Jump aircraft normally operate within a 5 NM radius of the PLA, and pilots call three minutes before a parachute drop, then one minute before, and then they call “jumpers away.” When hearing the jump pilot’s three-minute call, other pilots operating aircraft in the Mercer circuit should either vacate the area, or land and taxi clear of the PLA, and shut down their engines. Jumpers may approach from 1 to 2 NM upwind of the PLA.

Jump aircraft descend very rapidly (at rates of up to 3000 ft/min), from drop heights of up to 13,000 feet, and they can be very hard to see. Skydivers are also very hard to see, even after they have deployed their parachutes. Parachute canopies usually open on descent between 5000 and 3000 feet.

**Airspace**

NZME is situated below the Ardmore GAA, within the Mercer MBZ.

ATC provide traffic information for aircraft above 4500 feet in the Auckland control area, but no information is given for aircraft below that altitude. Note that the GAA is only active during daylight hours.

It is therefore most important that pilots in the area maintain a vigilant lookout and provide accurate position reports. Parachutists may exit the aircraft within controlled airspace. They will, however, descend into uncontrolled airspace as they pass 4500 feet.
North Shore (NZNE) is a non-certificated aerodrome owned and operated by the North Shore Aero Club (NSAC). It is a very busy aerodrome with fixed-wing and helicopter training, commercial and private operations. There is also a great deal of itinerant traffic. NORDO aircraft often operate into and out of NZNE.

Aircraft using NZNE are required to maintain standard circuit flows, and taxiing aircraft need to consider other traffic before taxiing, because of passing difficulties on the narrow taxiways and confined manoeuvring areas. All grass areas are unavailable to aeroplanes, and ground movements are therefore confined to the sealed areas.

Visiting aircraft are welcome to use the visitors’ parking spaces provided. See AIP New Zealand, Vol 4 for details. Parking for aircraft with special requirements (eg, large aircraft and helicopters) may be prearranged with the NSAC.
**Airspace**

NZNE is located within the North Shore CFZ, which shares common lateral boundaries (except to the east) with the North Shore GAA, extending from the surface to 2500 feet. The North Shore Aerodrome and CFZ frequency is 118.0 MHz. Above the CFZ is the North Shore GAA (2500 to 3500 feet) where intensive VFR training takes place.

The two danger areas off the Whangapara peninsula are for land-based weapons, firing to the northeast (out to sea). D130 is permanently active from the surface to 1200 feet, while D125 is activated by NOTAM.

To find out when, and to what altitudes, D125 is active, check the area NOTAMs. Also, if these danger areas are active, red flags will be visible on the road access when approaching from the northwest. These areas should be avoided when active.

Wainui danger area (surface to 1000 feet, model aircraft flying) is 4 NM to the northwest of NZNE.

**Note:** North Shore is only 1.5 NM from the northern boundary of the Whenuapai CTR, so caution is required when operating to the south of the field.
Arrival

*From the south or east via Whangaparaoa transit lane*

Track via Okura River Mouth and, when clear of the VFR transit lane, make an immediate climb to 1700 feet for a standard overhead join. Beware of traffic transiting south from Whangaparaoa to the city. This traffic should be on 118.0 MHz up to the transit lane boundary. Also, watch for traffic downwind for Runway 21, or climbing out from Runway 09. Take care not to cut the corner, or you may infringe the Whenuapai CTR.

**Caution:** When using this route, you fly over the Weiti Forest. The terrain here is generally higher than the surrounding area (up to 415 feet elevation).
From the south or east via Whenuapai CTR

This arrival will allow a higher inbound altitude, but leaves very little time to contact North Shore Traffic once clear of the Whenuapai CTR. Consider requesting an early change of frequency, or if you have a second radio, monitor North Shore Traffic on 118.0 MHz.

From the north

The normal track is along the coast via Orewa and then overhead Silverdale industrial area and motorway interchange. The approach angle is quite acute, and an extra orbit overhead may be required for orientation, and to develop situational awareness of other traffic.

Orewa VRP is the bridge over the inlet. Often traffic to and from Great Barrier Island will track via the Whangaparaoa Peninsula and Red Beach (0.5 NM south of Orewa Inlet).

From the west

Monitor 118.0 MHz from the CFZ boundary. Common local references are Waitoki and Wainui townships (Wainui has a large blue and white equestrian centre). These points are both marked on VNC D1 (1:125 000) and are good references for distance and direction-based position reports when joining.
Local Operations

Circuit procedures

» Circuits for all aircraft are left-hand for all runways.

» Fixed-wing circuit height is 1200 feet, and helicopter 800 feet.

» Fixed-wing aircraft are requested to carry out a standard overhead join.

» Joining on long final to any runway is NOT permitted, except for aircraft carrying out an instrument (GNSS) approach to Runway 03 or 21. Reporting points are LIBKO (7 NM final for Runway 03) and UPLIN (10 NM final for Runway 21). Circuit traffic retains the right of way.

» Helicopters should join straight in for Runway 09 or Runway 27 at 800 feet, clear of active runways and the fixed-wing circuit. Joining right base for Runway 03 or Runway 21 is NOT permitted.

» Standard right-of-way rules apply, but remember that with training aircraft, there will be solo students who require greater consideration.

» There are a number of slower vintage and amateur-built aircraft operating from NZNE, and with these it can be difficult to judge circuit spacing. Allow sufficient space for the preceding aircraft to land and taxi clear.

» Stopping and backtracking is not a suitable method of clearing the runway. Continue rolling ahead to the next taxiway or the runway intersection, then vacate to the apron. Use of grass areas is prohibited.

» Priority should be given to air transport aircraft, whenever possible, to prevent excessive delays.
Training areas

The North Shore GAA is the NSAC’s primary training area and is used extensively. NSAC and Rodney Aero Club both use the LFZ on the eastern side of the Kaipara Harbour for low-flying training. Local procedure in the LFZ is to operate not below 200 feet AGL because of bird hazards, and to call Kaipara Traffic on 119.1 MHz when entering and exiting. Permission from the using agencies is required before using this LFZ. See AIP New Zealand, Vol 1 for details.

Night operations

Pilot activated lighting is available – see AIP, Vol 4. Night operations require written approval from the aerodrome operator. Standard circuits are flown using Runways 03 and 21. A curfew applies from 22:00 to 07:00 local time.

Standby power is not available and after hours lighting failures may not be notified.

Any night flight to North Shore should therefore nominate a suitable alternate aerodrome such as Ardmore or Auckland.

Helicopter activity

Intensive helicopter activity and training takes place to the east of Runway 03/21, and on all runways as required. Low level training may take place clear of, but parallel to, the fixed-wing circuit in use. There is a touchdown and lift off area about 1.5 NM southeast of the aerodrome, and training operations are also conducted in the Riverhead Forest LFZ. See current VNCs.

Parachuting

No parachuting takes place at NZNE, but one of the busiest parachute operators in the North Island use Parakai aerodrome (NZPI) and have a PLA adjacent to Parakai aerodrome. Both military and sport parachuting takes place at Whenuapai (NZWP).
**Departure**

Aircraft are not permitted to make a right turn until clear of fixed-wing and helicopter circuits or above 1700 feet.

**To the south**

During Whenuapai Tower hours of watch this route requires transit through the Whenuapai CTR. Listen to the ATIS before departure, then call Whenuapai Tower for a clearance. Routing will normally be via Coatesville, North Harbour Stadium, and the Northern Motorway to Harbour Bridge. If the tower is off watch, broadcast callsign, position, altitude, and intentions on 134.5 MHz (Whenuapai Traffic) before entering the CTR. Note: Outside Whenuapai Tower hours of watch, the CTR becomes an MBZ.

**To the east**

If a clearance has been obtained from Whenuapai Tower, routing will normally be via Browns Bay and the east coast beaches. If uncontrolled, track north of the circuit before turning east over Silverdale, then if proceeding south, via Stillwater, Weiti Forest, Okura River Mouth, and the transit lane.

**Note:** If continuing east, via Whangaparaoa, you will need to check the NOTAMs before departure to establish whether the two danger areas on the end of the peninsula are active.

**To the north**

Normally via Orewa Inlet or the Wainui area.

**To the west**

Normally via Waitoki or Riverhead Forest.

---

*Wainui looking east.*
Silverdale looking northeast. Orewa VRP in the background.

Silverdale looking south.
Parakai (NZPI) is a non-certificated aerodrome located 2 NM northwest of Helensville. Extensive commercial and sport parachuting takes places at NZPI as well as general aviation activity and flight training. The aerodrome is available for general use for private operations, but commercial operations require the prior approval of the aerodrome operator.

Airspace

NZPI is situated in uncontrolled (Class G) airspace beneath the Auckland CTA 2500-ft step.

There are two MOAs, Kaipara and South Head, to the northwest (7.5 and 13.5 NM respectively). Both are activated by NOTAM, in which the upper limit will also be specified.

Pilots intending to transit to the north via the west coast must ensure that the status of the MOAs is known before departure. Red flags are normally placed on the access road when either of these areas is active.

Arrivals

Due to parachute operations pilots should avoid using the standard overhead join procedure.

From the south and west

Transiting via the Te Henga VFR transit lane, stay over the sea and not above 1500 feet until 1 NM past the Muriwai golf course, at which point a climb to 2500 feet is available if required. Broadcast position, altitude, and intentions on the MBZ frequency 123.5 MHz (Parakai Traffic) passing Muriwai golf course,

Parakai aerodrome looking south.
and track initially towards Helensville (visible against the hills to the north). From Helensville, follow the general direction of the Kaipara River.

From the north
Track via the eastern shore of Kaipara Harbour, not above 2500 feet. Broadcast position, altitude, and intentions on the MBZ frequency 123.5 MHz (Parakai Traffic) abeam Shelly Beach. Continue tracking towards Helensville until sighting the runway, 2 NM short of Helensville.

From the east and from North Shore
Track via Kaukapakapa, broadcast position, altitude, and intentions on the MBZ frequency 123.5 MHz (Parakai Traffic) crossing the power line west of Kaukapakapa.

Local Operations

Circuit procedures
The runway is designated 07/25, with the circuit directions left-hand on 07 and right-hand on 25. After takeoff from Runway 07, a mandatory left turn is required on reaching the river, because of high ground beyond. Arriving on 25, many operators prefer a close, curved approach to avoid the same high ground.

The parachute landing area is immediately north of the aerodrome and parachutists cross the runway extended centreline 1000 feet or above. Pilots should remain 500 feet or below while over the runway.

Note that the parachute landing area is in the centre of the circuit.

Grass areas are unusable from May through to October and after heavy rain.

Circuit heights are 1000 feet for traffic operating at more than 80 knots IAS, and 500 feet for traffic slower than 80 knots.

Parachuting
One of the busiest training, commercial and sport parachute operators in the North Island uses Parakai runway and has a PLA adjacent to Parakai aerodrome.

Departures
Normal departure procedures apply, but for departures to the east and to North Shore, track to Kaukapakapa before changing to the North Shore CFZ frequency.
Waiheke Island KE

General
Waiheke (NZKE) is a non-certificated aerodrome located on Waiheke Island. It is situated on a ridge approximately halfway between Onetangi and Woodside Bay, and 2 NM east of Ostend. The grass runway is designated 17/35, and the surface can be soft after heavy rain and closed in winter.

All aircraft overflying, arriving, or departing NZKE must comply with the published arrival and departure procedures. NZKE is a privately owned aerodrome and the operator requires all aircraft overflying, arriving, or departing, comply with the published arrival and departure procedures.

Airspace
NZKE lies within the Hauraki Gulf CFZ. See the Airspace Overview, page 6, for details.

Arrivals
Because of traffic transiting between Auckland and Great Barrier Island, pilots approaching NZKE from the west should broadcast their position and intentions on 120.4 MHz before crossing the channel between Motutapu and Motuihe Islands and the western end of Waiheke Island. Another broadcast is required when 2 NM from NZKE.

Remember to study AIP New Zealand, Vol 4 before departure. Avoid overflying the residential area to the north and west of the aerodrome. Pilots should avoid using the standard overhead join.

Runway 17
Caution: Possible severe windshear on short final for Runway 17 in southwesterly wind conditions.
From the south

» Join the circuit left-hand downwind, and broadcast callsign, position, altitude, and intentions.

» Fly the 45-degree offset base leg/final approach track from the late downwind position to avoid overflying the residential area to the north of the extended runway centreline.

» Broadcast position before turning onto very short final approach.

» After landing, broadcast intentions, and exit the runway via the taxiway at the southern end.

From the north

» Join the circuit via the 45-degree offset final approach track, then as for a southern approach.

Runway 35

Caution: Possible severe turbulence on short final for Runway 35 in easterly conditions.

From the south

» Join straight in for a final approach and broadcast position, altitude, and intentions.

» After landing – as for Runway 17.

From the north

» Join the circuit right-hand downwind and broadcast position, altitude, and intentions – then as for joining from the south.
Western end of Waiheke Island.

Helipad used for drop-off and pick-up operations only.
Local Operations

» Pilots who are not on the Waiheke aerodrome approved operators list must contact Waiheke Airfield Management to arrange a briefing. See *AIP New Zealand, Vol 4* for details.

» If fitted, landing or anti-collision lights should be used at all times within the vicinity of NZKE and Waiheke Island.

» Touch-and-go landings are prohibited.

» Avoid prolonged parking in the passenger set-down area.

» No parking on the helipad – this area is used frequently by emergency services.

Departure

Monitor 120.4 MHz and broadcast intentions before taxiing.

Runway 17

Normal departure considerations apply.

Runway 35

After takeoff, make a 45-degree right turn (as soon as practicable to do so) to avoid overflying the residential area to the north and east of the extended runway centreline.
Whenuapai (NZWP) is a military aerodrome. Civil operations require the prior approval of the RNZAF. This approval can be obtained through Base Operations Tel (09) 417-7442. Refer AIP supplements for ATC hours of watch.

Glider flying, parachuting, and model aircraft flying, take place most weekends at NZWP.

**Airspace**

Located 12 NM northwest of Auckland city, NZWP is encompassed by a permanently active circular MOA of 3 NM radius. The Whenuapai CTR is designated Class D airspace and is bounded by the Auckland City MBZ to the south, the Hauraki Gulf CFZ to the east, and the North Shore CFZ to the northeast.

VFR transit lanes are established off each coast within the Whenuapai CTR to assist aircraft in transit. These are Class G airspace by day. Note that these lanes have different upper limits: 1500 feet for the Te Henga VFR transit lane (west coast), and 1000 feet for the Whangaparaoa VFR transit lane (east coast).

Whenuapai GAA is located to the north of the aerodrome. It extends from 2500 to 3500 feet, and is available for use with prior ATC approval (Auckland Approach 124.3 MHz). Also located to the north of the aerodrome, and below this GAA, is the Riverhead Forest LFZ. Refer to the VNC for more information on lateral dimensions.
Operating in the CTR

Before entering the CTR, listen to Whenuapai ATIS on 128.3 MHz and check if Whenuapai Tower (134.5 MHz) is on watch. A clearance is required to transit the CTR when the tower is on watch. If the tower is unattended, the Whenuapai MBZ is active, and pilots must listen out on 134.5 MHz and broadcast their intentions at intervals of no more than five minutes.

At all times, pilots must remain clear of the MOA, unless prior entry permission has been granted.

Transiting pilots should note that there is a busy civil heliport at Rosedale Road, 5 NM northeast of Whenuapai, on the approach to Runway 21. Helicopter traffic arriving at and departing from Rosedale Road Heliport transmit their intentions on 134.5 MHz if Whenuapai Tower is unattended. The heliport is marked on VNC D1 (1:125 000).

IFR Communications Outside Tower Hours

Arrivals

» Contact Whenuapai Operations on 135.1 MHz at least 30 minutes before arrival.

» Terminate flight plans with Auckland Approach on 129.5 MHz.

» Make standard MBZ and aerodrome calls on 134.5 MHz.

Departures

» Contact Auckland Approach on 129.5 MHz for clearance and traffic information before departure.

» Maintain listening watch on 129.5 MHz.

» Two minutes before takeoff, report ready to takeoff on 129.5 MHz.

» Make standard MBZ and aerodrome calls on 134.5 MHz.
In, Out and Around Auckland was revised in August 2018.
See our web site, www.caa.govt.nz, for details of more CAA safety publications.