



Emergency Management Otago
Te Rākau Whakamārama Ōtāgo

Aviation Emergency Support Plan (AESOP)

CD CIVIL DEFENCE

Map callouts include:
 FISCOM QN TWR 128.9
 LL FL175 CH 129.3 TM
 LL 13500 QN 125.75 TM
 Queenstown VOR/DME 113.6 QN
 FISCOM CH INFO 122.2
 Queenstown TWR 318.1 ATIS 126.4 ELEV 1171 1777m
 7500 SFC QN 118.1
 7550 SFC DAY
 3000 SFC DAY
 4000 SFC DAY
 5000 SFC DAY





Contents

Purpose Statement	1
Strategic Objectives	2
Operational Objectives	3
Plan Activation Triggers	4
Standard Operating Procedures(SOP's)	4
SMEACS Briefings & Situational Awareness	5
Collaboration with Fire & Emergency NZ	6
Areas of Operations (AoO)	6
Areas of Operations & Designated Zones	7
Regional Air Desk & Aviation Coordination Centres	8
Regional Air Desk & Aviation Coordination Centre Structure	8
Regional Air Desk	9
Command, Control & Coordination / Incident Command Systems (ICS)	10
Control & Coordination Structure	10
Tactical Command Structure	11
Tactical Liaison	11
Radio Communications Coordination Plan (RCCP)	13
Air Operations Platform (AOP)	13
Aircraft deployment and tasking	14
Lifeline & Utility Assessment	15
Sample CDEM Tasking Request Form	16
Reconnaissance Instructions (RI's)	17
Observers Undertaking Damage Assessment Flights	18
Community Response Plans (CRP's) – Tactical Sites	19
Aerial Photography, Unmanned Aerial Systems (UAS / Drones) & Satellite Imagery	20
Aerodromes & Airport Operators	23
Mass Evacuation / Medevac – Queenstown Lakes Area of Operations (AoO)	25
Flight Time Recording and Payment	27
Sample FENZ Flight Operations Return Form – RF-244	28
Roles of Non FENZ Certified Aircraft & Itinerant Aircraft Movements	29
Fixed Wing Aircraft	29
Hub & Spoke / Shuttle Configuration	30
Airspace Control	31
Fuel Supplies & Management	33
Fixed Installation Aviation Fuel Supplies (August 2020)	34
Private Aviation Fuel Supplies	35

Purpose Statement

In the event of region wide natural disasters, to ensure the overall coordination of aircraft movements within the Emergency Management Otago (EMO) area of operations (AoO) and across its regional boundaries, with the intent of ensuring the efficient use of limited aircraft resources and aviation fuel supplies. To ensure compliance with the National Emergency Management Agency (NEMA) Director's Guideline - Impact Assessments [DGL 22/20] to undertake early aerial reconnaissance that will enable the development of a common operating picture for the benefit of local, regional, and national emergency management agencies and lifeline utility organisations. Also, to enable transportation of key emergency management staff to their designated coordination centres as soon as is practicable.

NOTE: This AESOP is not a medical evacuation (medevac) or aerial search & rescue plan. It is assumed that the dedicated air rescue and air ambulance services have their own contingent response plans in place for regional scale events. However, early AESOP aerial reconnaissance reports will assist these rescue organisations identify the locations and areas of priority for their rescue missions.

Strategic Objectives

- ▶ Meet the requirements of the National Emergency Management Agency (NEMA) Director's Guidelines – Response Management [DGL 06/08], Impact Assessments [DGL 22/19], Logistics in CDEM [DGL 17/15], Lifelines Utilities and CDEM [DGL 16/14] and the Tsunami Advisory & Warning Plan [SP 01/20].
- ▶ Provide assurance to the Otago CDEM Group Controllers and Local Controllers that early reconnaissance will provide them with enough information with which to make initial response decisions.
- ▶ Enhance interagency collaboration and interoperability in the use of aircraft.
- ▶ Provide a commonality of safe aviation practice across all aircraft operators providing aviation and associated activities to Emergency Management Otago.
- ▶ Support the “SEEL” objectives for aircraft procurement and use i.e. Safe, Effective, Efficient, Logistically appropriate.
- ▶ Minimise the duplication of cost and time imposition for aircraft operators and ensure the simplification of processes.
- ▶ Demonstrate the duty of care under the Health & Safety at Work Act for PCBUs with overlapping duties to consult, cooperate and coordinate their activities.

Operational Objectives

- ▶ Support the search & rescue of people and animals.
- ▶ The setup of a collaborative command & control structure.
- ▶ Implement structured and prearranged reconnaissance plans.
- ▶ Establish the condition of health and medical facilities post event.
- ▶ Coordination of civil and military aviation operations.
- ▶ Early identification of disruption and pinch-points to roading and bridge networks.
- ▶ Identify the conditions of aerodromes, runways, heliports, and aviation facilities.
- ▶ Assess marine facilities such as ramps, jetties, and wharves.
- ▶ Quantification of available aviation fuel supplies.
- ▶ Identify and record damage to vertical and horizontal infrastructure generally.
- ▶ Observation of hydroelectric and irrigation dams and structures.
- ▶ Transport emergency response staff to their respective coordination centres (CC's) to expedite the initial response.
- ▶ Establish the locations of suitable staging and assembly areas.
- ▶ Early establishment of a contingent aviation and CDEM reconnaissance radio communications network.
- ▶ Contact with isolated communities and rural properties.
- ▶ Develop a common operating picture across all response and lifeline agencies.
- ▶ Mitigate further casualties or damage arising from secondary hazards.
- ▶ Provide information to the intelligence, planning, operations, and public information management (PIM) units of agency coordination centres (CC's), emergency operations centres (EOC's), and the emergency coordination centre (ECC).
- ▶ Ensure that areas of most need are identified early in the response to enable the coordination of international, national, regional, and local civil defence & emergency management responses.
- ▶ Manage itinerant aviation operators.
- ▶ Safe management of airspace.

Plan Activation Triggers

- 1** Direct instructions from the Local or Group Controller, EOC response, operations or intelligence managers or an Otago CDEM emergency management officer.
- 2** Region wide disruption to the roading network caused by severe seismic activity or weather type events such as severe flooding, heavy snowfall, or wind damage.
- 3** Region wide electricity and / or telecommunications failures following severe seismic activity or severe weather events such as severe flooding, heavy snowfall, or wind damage.
- 4** Region wide damage to structures, buildings or dwellings following severe seismic activity or severe weather events such as severe flooding, heavy snowfall, or wind damage.
- 5** Reports of or the threat of a local source tsunami following a severe, long duration earthquake.
- 6** As directed by the National Emergency Management Agency (NEMA).

Standard Operating Procedures (SOP's)

Emergency Management Otago has SOP's in place for the activation of its ECC and EOC's. The AESOP Appendix contains specific procedures, tasking and operational guidance that should be adopted.

Operational procedures in the air and associated activities on the ground will align with the Interagency Standard for Use of Aircraft and its Supplements - Use of Aircraft at Wildfires and Use of Unmanned Aerial Systems.

Nothing in this plan is intended to override or replace any SOP's that aviation operators may have in place.

SMEACS Briefings & Situational Awareness

To aid situational awareness, develop a common operating picture and ensure consistent briefings, the SMEACS format will be used within the Regional Air Desk (RAD) and district Aviation Coordination Centres (ACC's).

ACTION		DETAIL REQUIRED
S	Situation	Event description / Weather & Tide Forecasts / Fire Weather / Tsunami Threats / Damage Assessments / Future State
M	Mission	Priorities / Strategies / Objectives / Taskings / Reconnaissance Instructions / Contingency Plans
E	Execution	Areas of Operations / Zones / Divisions / Sectors / Flight Plans
A	Administration & Logistics	Fuel Supplies / Coordination Centre Locations / Staging Areas / Assembly Areas / Supply Depots
C	Command & Communication	Radio Communications Plan / Radio Communications Coordination Plan / IMT & EMT Structures / Supporting Agencies / NZDF, Airways NZ, NZ Police, RCCNZ Liaison
S	Safety	Risk Management & Risk Assessments / Crew Resource Management / Natural Hazard Assessments / Health Warnings / Psychosocial Impacts

Collaboration with Fire & Emergency NZ

The Interagency Standard for the Use of Aircraft is a Standard that is jointly owned by Fire and Emergency NZ (FENZ) and the Department of Conservation. It is structured so that other Crown agencies may align to the Standard should they so determine. Its purpose was supported by the New Zealand Civil Aviation Authority and the New Zealand Defence Force.

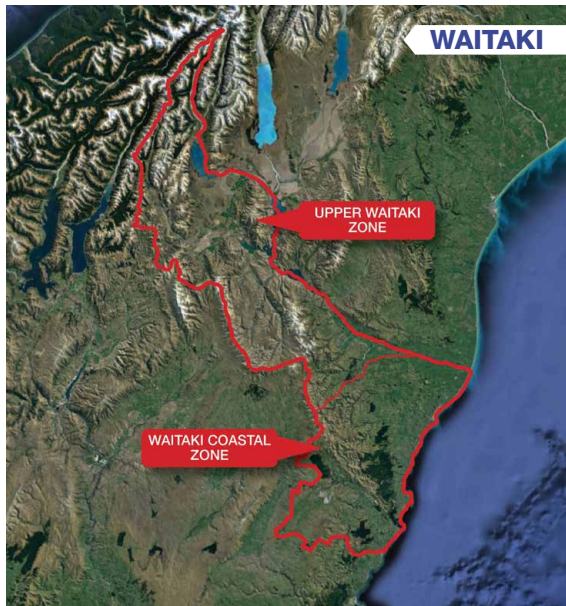
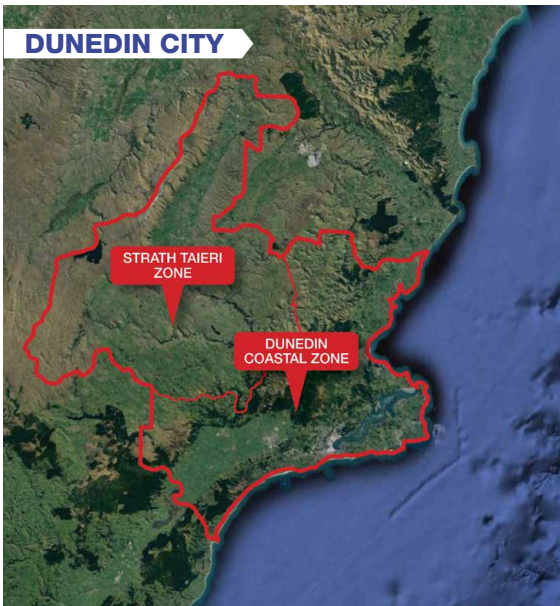
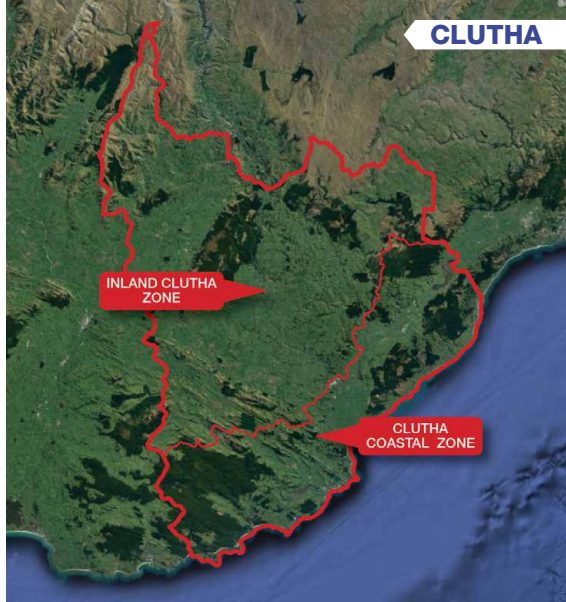
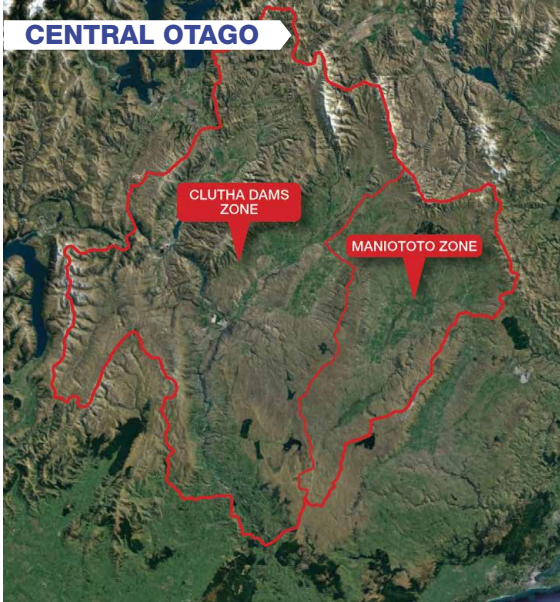
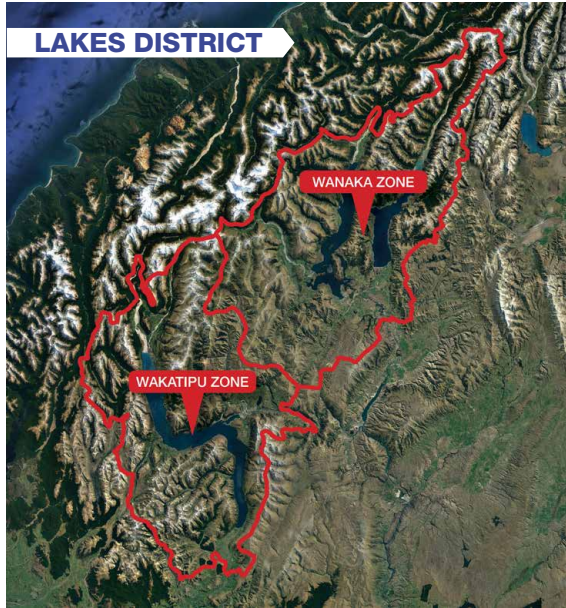
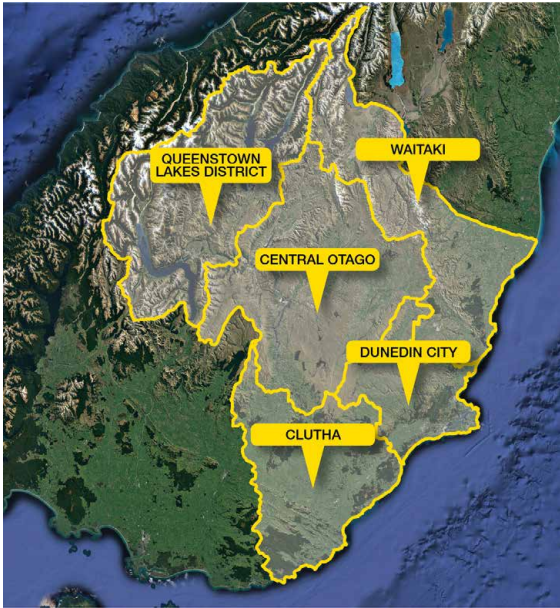
Emergency Management Otago has developed a Memorandum of Understanding (MoU) with FENZ to engage, deploy, task and manage certain aircraft on Emergency Management Otago's (EMO) behalf during emergencies that are considered too large or complex for EMO to undertake as a stand-alone response agency.

The term "engage" refers to the requirement of operators who work under Civil Aviation Regulations Parts 119/135 and Parts 101/102 to be "certified" under either the Interagency Standard for the use of Aircraft or the Supplement - Use of Aircraft at Wildfires. The term "certain aircraft" includes unmanned aerial systems (UAS / Drones) as covered by the Operational Supplement – Use of Unmanned Aerial Systems, which forms part of the Interagency Standard for the Use of Aircraft.

Areas of Operations (AoO)

Emergency Management Otago (EMO) consists of the five Territorial Local Authorities (TLA's) / Districts with the Otago Regional Council as the administering body. Each district can exercise the powers of the CDEM Act 2002 independently. In line with the CIMS and ICS principles of manageable spans of control and the division (sectorisation) of effort, Otago has been divided into five (5) Areas of Operations (AoO's) consisting of the district areas. These AoO's are further divided into Zones, Divisions and Sectors [Refer to the AESOP Appendices for further detail].

AREAS OF OPERATIONS & DESIGNATED ZONES



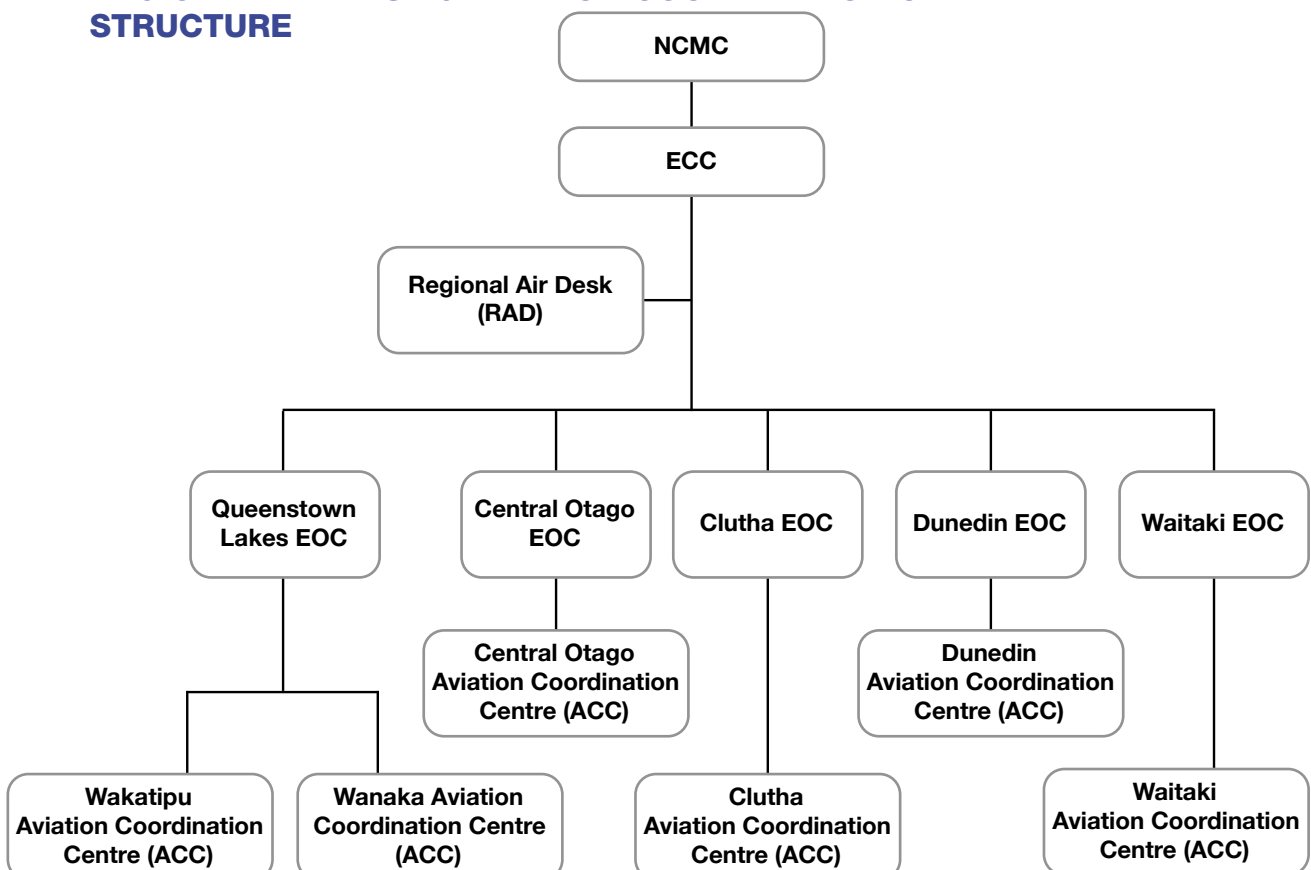
Regional Air Desk & Aviation Coordination Centres

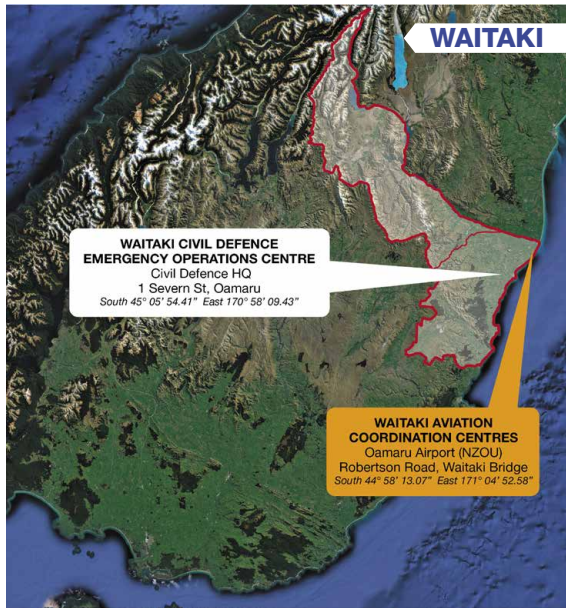
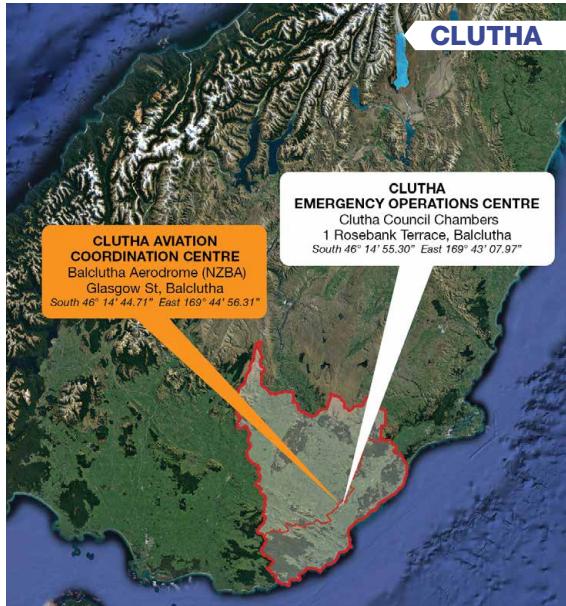
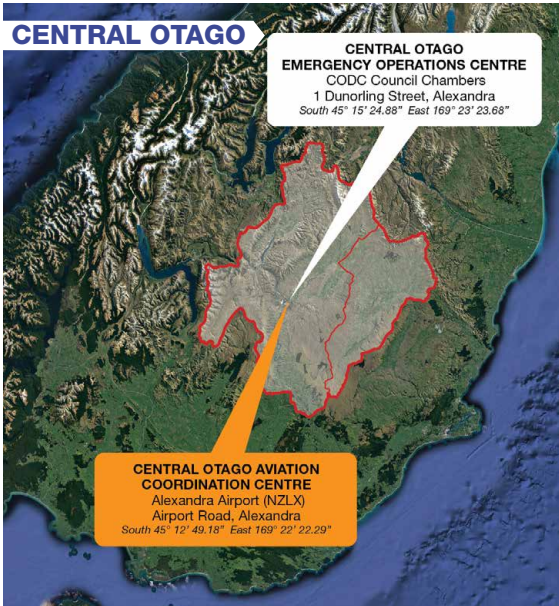
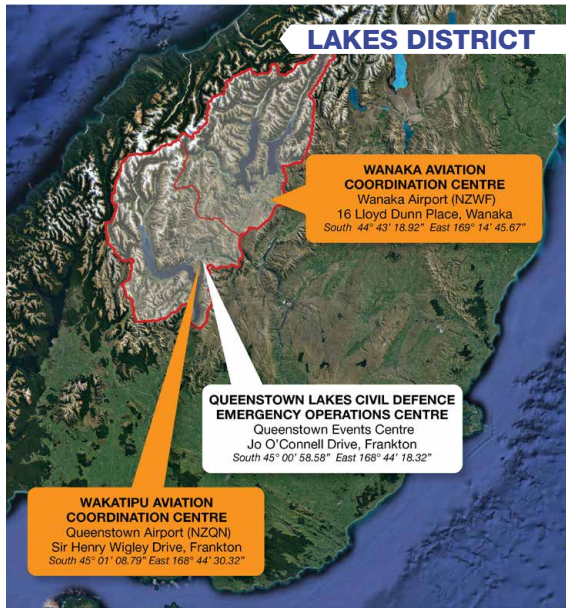
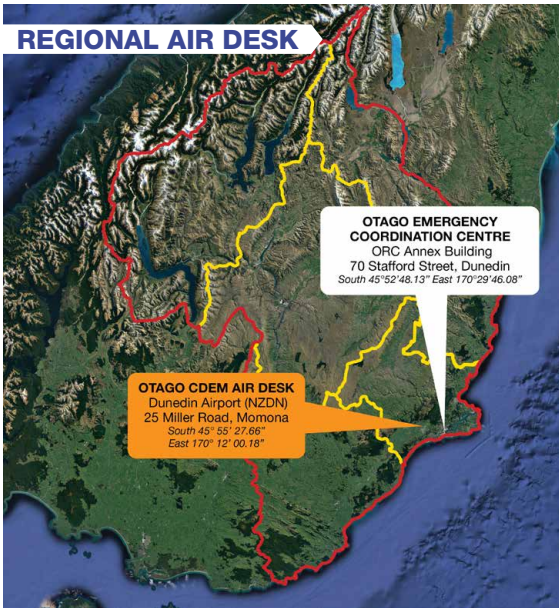
Emergency Management Otago's Emergency Coordination Centre (ECC) will coordinate the regional air operations function through the Regional Air Desk (RAD) located at Dunedin Airport. Each of the district AoO's will be managed by its respective emergency operations centres (EOC's), with air operations run from its identified Aviation Coordination Centres (ACC's).

For a region wide event, considerable liaison and coordination of aircraft movements and their deployment to Aviation Coordination Centres (ACC's) or Assembly Areas (AA's) will be necessary. Coordination of a combination of international and NZ based military and civilian aircraft will be required. Liaison with New Zealand Defence Force (NZDF) personnel, Airways NZ and Airline staff will be coordinated from the Regional Air Desk (RAD). In the case of significant activity in a particular Area of Operations (AoO's) becoming apparent, it may be necessary to support the affected local ACC with extra liaison personnel. In principle the RAD should not directly task any aircraft. It is the role of the ACC's to deliver the aviation services within their AoO's.

NOTE: Search & rescue and medevac flights will be the direct responsibility of dedicated rescue helicopter, air ambulance or Defence Force aircraft. Agencies such as the Rescue Coordination Centre of NZ, NZ Police, Fire & Emergency NZ, St John, District Health Board EOC staff, Department of Conservation or NZDF personnel may authorise and task mercy, medevac, or search & rescue flights.

REGIONAL AIR DESK & AVIATION COORDINATION CENTRE STRUCTURE



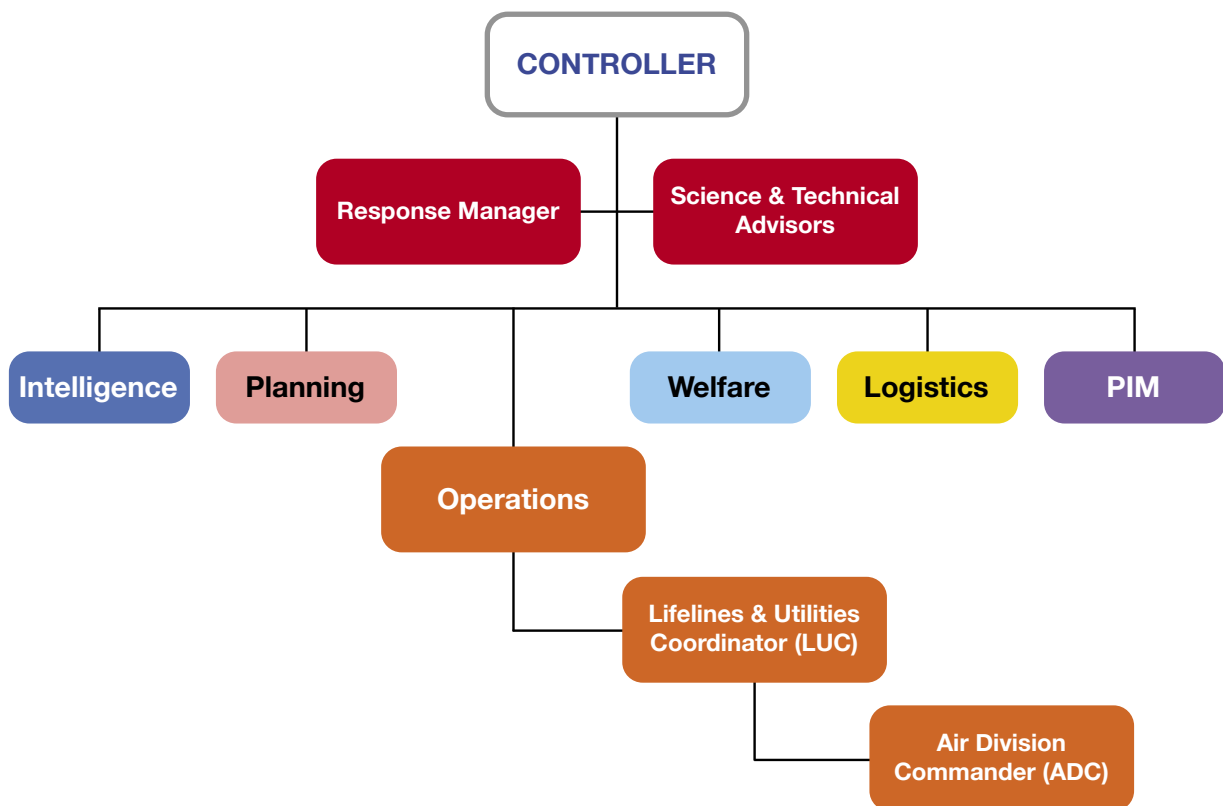


Command, Control & Coordination / Incident Command Systems (ICS)

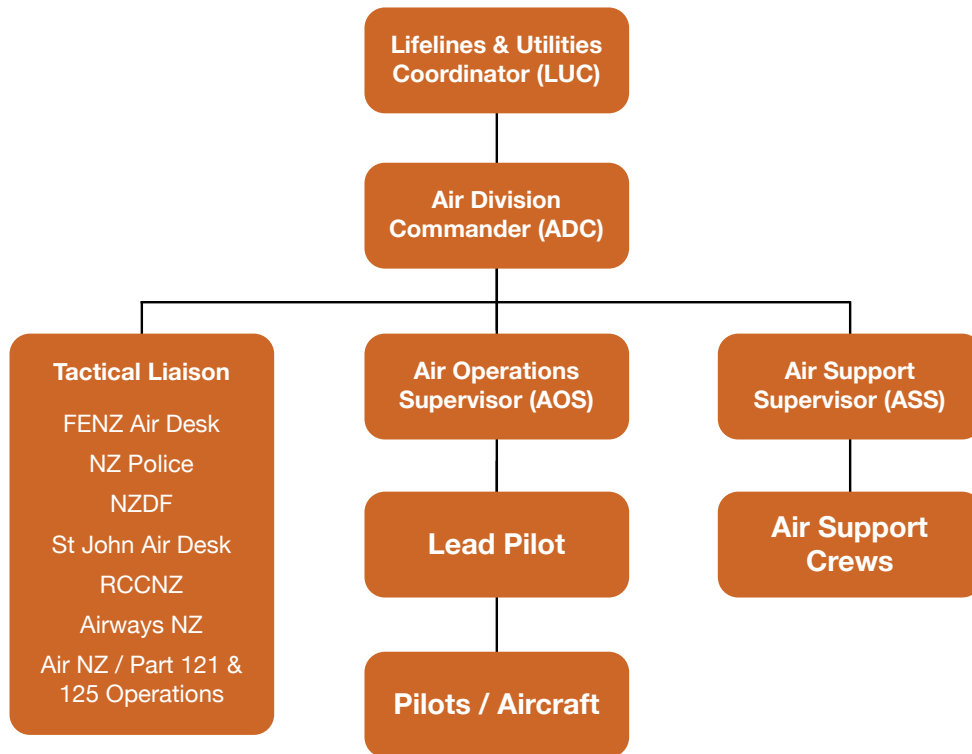
Emergency Management Otago operates under the nationally mandated Coordinated Incident Management System (CIMS). To facilitate FENZ's operational preference for the Australasian Interservice Incident Management System (AIIMS), a combination of the CIMS and AIIMS ICS will be adopted as depicted in the organisational charts below.

Variations to the AIIMS ICS will be the reporting line of the Air Division Commander (ADC) to the CDEM Lifeline Utilities Coordinator (LUC). Under AIIMS the ADC reports directly to the Operations Manager. However, in a CDEM response, the assessment, repair, and reestablishment of infrastructure is critical for the delivery of the response, welfare services and for long term recovery. Also, the renaming the role of the Air Attack Supervisor (AAS) to that of Air Operations Supervisor (AOS) better reflects the broader responsibilities of the role in a CDEM context.

CONTROL & COORDINATION STRUCTURE



TACTICAL COMMAND STRUCTURE



TACTICAL LIAISON

- ▶ **FENZ AIR DESK** – FENZ have established a National Air Desk, based out of its Southern Communications Centre (SouthComm) in Christchurch. It integrates the national Police / Fire 111 network with the Australasian Fire Authorities “ARENA” online aviation database. The system shows FENZ despatch staff the most appropriate aircraft available for deployment and tasking. ARENA manages aircraft availability & status, aircraft activity, aircraft equipment, organisations & personnel, terms of engagement & contracts and administration requirements.
- ▶ **NZ POLICE** – The New Zealand Police coordinate Category One searches which usually involve local resources and people who are familiar with the area. These searches include land searches, subterranean searches (for missing cavers), river, lake and inland waterway searches and close-to-shore marine searches – usually within New Zealand territorial waters (12 nautical miles). They work with volunteer groups such as New Zealand Land Search and Rescue, Coastguard New Zealand, New Zealand Defence Force, Amateur Radio Emergency Corps, and local rescue helicopters.
- ▶ **NEW ZEALAND DEFENCE FORCE (NZDF)** – NZDF support, in particular RNZAF and RNZN resources, must be requested by the Group Controller via the NCMC operations group. RNZAF and RNZN aircraft are capable of medevac, evacuation, search & rescue, humanitarian, reconnaissance, and logistics missions. NZDF support can also be requested for ground-based logistics, telecommunications, and aircraft traffic management.

- ▶ **ST JOHN AIR DESK** – The St John Air Desk centralises the dispatch and coordination of all emergency air ambulance helicopter resources in the country. St John Air Desk staff will assess calls for service to help ensure the right types of helicopters are dispatched to the right situations, carrying the right medical crew based on evaluations of the locations and terrain they are going to, weather conditions and patient requirements.
- ▶ **RESCUE COORDINATION CENTRE OF NZ (RCCNZ)** – The Rescue Coordination Centre New Zealand (RCCNZ) is part of Maritime New Zealand and is one of the two coordinating agencies for search and rescue (SAR) in New Zealand. Its role is to coordinate SAR services at a national level for all aviation and off-shore marine incidents within New Zealand’s Search & Rescue Region (SRR), and any land-based searches involving distress beacons (Category Two). This can involve the mobilisation of a large number of NZ and international SAR resources. They also support NZ Police, their partner coordinating agency, who coordinate missions at a local level for all land, marine close-to shore, inland waterway, and subterranean incidents (Category One).
- ▶ **AIRWAYS NZ** – Airways NZ is the controlling agency for New Zealand’s domestic Flight Information Region (FIR). They are responsible for the provision of air traffic management services to New Zealand’s airlines and commercial aircraft operators, airports, general aviation communities, and the New Zealand Defence Force. Otago region’s airspace consists of controlled (Class C) and uncontrolled (Class D) airspace. Of particular note are the Dunedin and Queenstown airport control areas and control zones. All AESOP activity within those control zones and areas will comply with Air Traffic Control (ATC) instructions and CAA regulations.
- ▶ **AIR NZ / PART 121 & 125 OPERATIONS** – Air NZ is the primary operator of medium and large passenger and cargo aircraft in New Zealand. As such it is in a special position to provide assistance and advice on passenger and cargo logistics during natural disasters. It will also act in a liaison role for other Part 121 & 125 operators such as Air Chathams and Jetstar.

Part 121 prescribes the operating requirements for air operations conducted by a holder of an Airline Air Operator Certificate that has;

- a seating configuration of more than 30 seats, excluding any required crew member seat; or
- a payload capacity of more than 3410 kg

Part 125 prescribes the operating requirements for air operations conducted by a holder of an Airline Air Operator Certificate that has;

- a passenger seating configuration of 10 to 30 seats; or
- a payload capacity of 3410 kg or less and a MCTOW of greater than 5700 kg; or
- a single engine and is carrying passengers under IFR

Radio Communications Coordination Plan (RCCP)

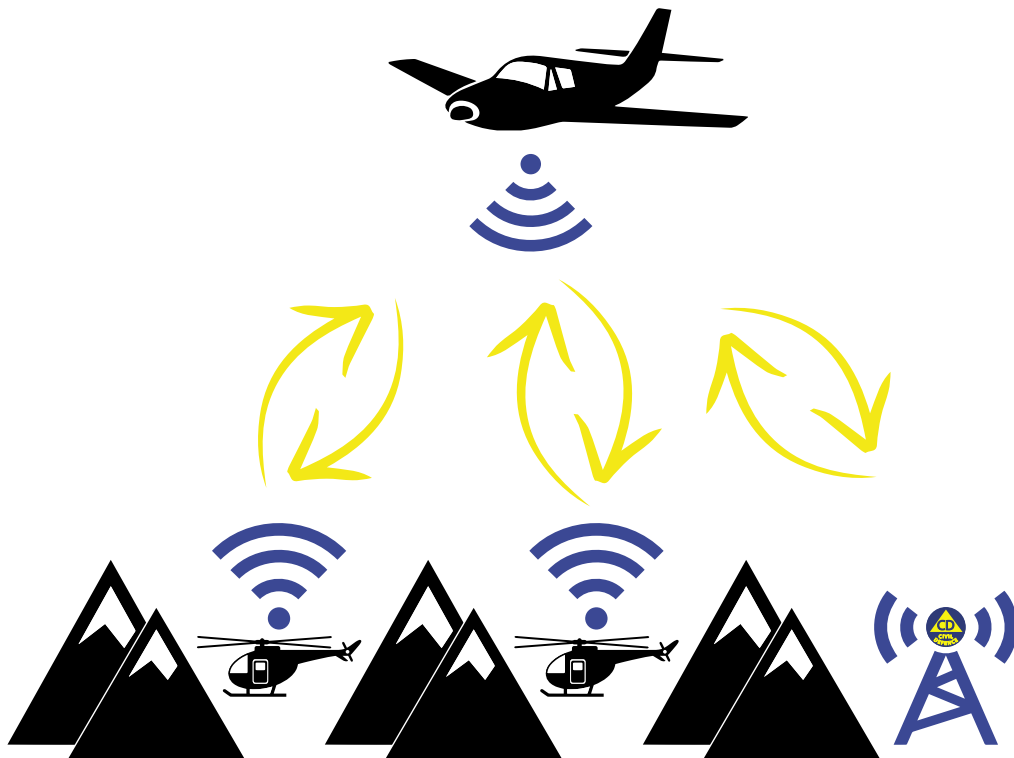
To enable radio communications between aircraft, ground based response personnel, emergency services, search & rescue agencies, lifeline utilities and the Otago CDEM coordination centres, the channel plan below will be adopted. The channel plan is effectively the FENZ wildfire aviation channel plan and the Fire – Common Traffic Area Frequency (F-CTAF). Included is the emergency services band (ESB) interagency “Liaison” repeater channel.

IDENTIFIER	DESCRIPTOR	SIMPLEX / RECEIVE / TRANSMIT	USE
ESB164	Emergency Services (ES) Liaison Repeater	Rx 143.0500 Tx 140.0500	Civil Defence / ES Liaison Repeater
ARX02	Aviation Fire 1 AM	130.050 (Simplex)	Air to Air
ARX60	Aviation Fire 2 AM	131.500 (Simplex)	Air to Air
ARX136	Aviation Fire 3 AM	134.000 (Simplex)	Air to Air
ESX009	Fire 4 VHF-FM	140.6125 (Simplex)	Air to Ground (F-CTAF)
ESX39	Emergency Services Liaison / Fire 10	140.9875 (Simplex)	Emergency Services / Air Ambulance Simplex Liaison

Air Operations Platform (AOP)

An AOP as depicted below should be deployed to provide the following;

- 1** Safety and oversight of multiple aircraft movements.
- 2** Contingent communication infrastructure for search & rescue, aviation, CDEM, emergency services and the Department of Conservation.
- 3** Enhanced search & rescue and medevac capability.
- 4** Increased reconnaissance capability.
- 5** Discrete radio coverage of the entire Otago Regional Area of Operations.



Aircraft Deployment and Tasking

The deployment, tasking, and tracking of aircraft during an event will present major safety, administrative and logistical challenges. To assist with their safe and effective deployment and to manage the interface between the different needs within coordination centres (CC's), these operating systems, platforms and applications will be utilised:

- ▶ **D4H** - Otago CDEM has adopted the web-based emergency management common operating platform, D4H. D4H is able to provide sitreps, updates, taskings, response and coordination facilities locations, contact details, resources, group texting & emailing, user alerts and a map viewer.
- ▶ **ARENA** - ARENA is a multi-disciplinary web-based database for integrated aircraft operator data management and aircraft tracking system in use with the Australian National Aviation Firefighting Centre. The system is part-owned by FENZ as a full partner in the National Council for Fire and Emergency Services. The system can integrate information from whatever satellite tracking system the operator is using.
- ▶ **OZRUNWAYS** – OzRunways is a proprietary application for aviation that provides flight planning, briefing, flight plan filing and moving map navigation. Pre-planned flight paths or reconnaissance instructions can be pre-loaded in anticipation of their future use.
- ▶ **FLIGHT TRACKING** – Most aviation operators now use some form of web-based flight tracking / flight following system, such as Spider Tracks and TracPlus. The ability to monitor and locate aircraft provides safety and logistical advantages.

▶ **GEOSPATIAL TECHNOLOGY / GIS APPLICATIONS** – ArcGIS and ArcGIS Survey123 are common GIS applications within the CDEM and emergency services environments. Geospatial data and information management will mostly be managed within the EOC's. Conversion of GIS information into aeronautical products will be undertaken by them and then provided to the Aviation Coordination Centres (ACC's).

▶ **GOOGLE EARTH** – Despite its limitations and potential to present historical imagery, Google Earth is able to provide reasonably accurate geospatial information. During an event, the ability to gather geospatial information from the public (crowd sourcing) and other response agencies needs to be catered for. Supplying the coordinates of particular sites, measuring distances, and plotting paths can be undertaken by lay people simply and effectively by using Google Earth's tools.

NOTE: Most of the above applications are web-based i.e. are dependent on cellular and Internet connectivity. It is highly likely that in the early stages of a major event that connectivity (cellular, Internet and radio) will be disrupted.

To assist with tasking priorities the National Emergency Management Agency (NEMA) Director's Guideline [DGL 22/20] - Impact Assessments, identifies the three stages of the damage assessment process i.e;

▶ **PHASE 1** – Wide Area Impact Assessment (Within 8 hours) – To obtain a rapid and broad picture of the extent of the damage on the impacted area, in order to determine and prioritise initial response activities and to target more detailed assessments.

▶ **Phase 2** – Rapid Impact Assessment (Within 8 – 48 hours) – To gather more data and information about the initial impact on social, economic, natural, and built environments of a community, as well as to identify assets or secondary hazards that may pose significant life safety risk.

▶ **Phase 3** – Specialist Detailed Assessment (48 hours+) – Includes welfare needs assessment and registrations, lifeline & utilities ascertaining the continuity of operations and the supply of services to affected communities and detailed building assessments to determine the extent and nature of structural damage suffered by buildings.

Lifeline & Utility Assessment

Phase 3 (Specialist Detailed Assessment) is the period during which the lifeline & utility agencies will be requesting aircraft to carry out detailed inspections and assessments of their own infrastructure. Most of these organisations will have preferred supplier contracts or arrangements already in place with aircraft operators. It is the responsibility of these agencies to deploy and task aircraft operators directly. If an ACC is requested to task an operator on behalf of a lifeline or utility it must be clearly recorded whom the costs of the mission sit with; if not, the costs will automatically be invoiced to the respective requesting agency.

NOTE: Lifeline agencies undertaking inspections and assessments are to notify the respective Lifeline Utilities coordinator (LUC) of their flight requests. This is to ensure that sufficient aircraft and fuel supplies are available, avoid duplication of effort and minimise the likelihood of congestion or flight path conflicts. The LUC will in turn notify the air division commander (ADC) of tactical approval or vice-versa, the ADC will seek approval from the LUC before tasking aircraft for further agency reconnaissance or damage assessment flights.

SAMPLE CDEM TASKING REQUEST FORM

TASKING REQUEST

Name of ECC / EOC / ICP / Other i.e. Where this tasking request is being processed		
Event Name / TLA / Sector Name		Task Ref #
Date & Time Task Requested	20...../...../..... :.....HRS (24HR CLOCK)	
Task Start Date & Time	Priority High <input type="radio"/> Medium <input type="radio"/> Low <input type="radio"/> 20...../...../..... :.....HRS (24HR CLOCK)	
Task Completion Date & Time	20...../...../..... :.....HRS (24HR CLOCK)	
Task Location / Area of Operations	S°.....'....." E°.....'....." (Example – S 45° 00' 57.44." E 168° 44' 19.59")	
Task Objective(s) (Action Plan Ref #) Attach further detail	1. 2. 3. 4.	
Supporting Tasks (Damage Assessment / Planning / Purchasing) Attach further detail	1. 2. 3. 4.	
Resources Needed (Logistics / Transport / Personnel / Aircraft / Communications Equipment & Plan) Attach further detail	1. 2. 3. 4.	
Public Information Management (Who else needs to know? i.e. MCDEM, Governance, IMT, Communities, Response Partners) Attach further detail	1. 2. 3. 4.	
Task Requested By (Name / Agency / Location)	Name: Signature:	
Approved By (Controller / Operations Manager / Logistics Manager / Finance Officer / Other - State who)	Name: Signature:	
Distribution List (Governance / CC's / Controller / Operations / PIM / Response Partners)		
Finance Reference # (Purchase Order Number(s))	Confirmation of Completion (Logistics to follow-up within 8 hours of start time) "COMPLETED" Stamp here on confirmation of delivery	

Reconnaissance planning & reconnaissance instructions (RI's)

The appendix contains priority sites that should be overflown as part of the initial wide area impact assessment phase. Optimal flight paths that minimise flight times but ensure effective assessment have been developed to form the RI's. It is incumbent on operators to take the most efficient and safest flight paths to ensure their missions meet their RI objectives.

Flight paths based on the priority site waypoints have been developed by the respective operators for flight navigation tools such as iPads and navigation applications like OzRunways. This will enable the retrieval of the designated waypoints and flight paths at any time in the future. Aircraft operators will need the ability to download the waypoints they have recorded during their reconnaissance flights into an electronic or spreadsheet format that is able to be integrated into civil defence GIS mapping products. This capability needs to be separate from any "flight following" devices operators may have on board their aircraft.

One of the challenges of the reconnaissance phase will be the possibility of overflying people and animals that are in obvious distress. It must be remembered, however, that the objective of the RI is the rapid identification and assessment of all victims for their swift rescue, medevac, or eventual evacuation. Radioing in the location and circumstances of victims will better enable the medical first responders to mount their responses at the correct tempo and with appropriate personnel, equipment, and supplies.

Further taskings as a result of the initial observations and intelligence gained from the RI flights will be required. It is probable that the evacuation of isolated but otherwise unharmed people will be required aside from search & rescue and medevac missions. Any further tasking beyond the RI's must have the specific approval of the group / local controller, response manager, operations manager or logistics manager and be coordinated through the respective air division commander (ADC).

Observers Undertaking Damage Assessment Flights

The National Emergency Management Agency (NEMA) Director's Guideline – Impact Assessments [DGL 22/20], identifies the following agencies as having responsibility for contributing to wide area impact assessments:

- ▶ Local Authorities
- ▶ Fire & Emergency NZ, including USAR
- ▶ Other response agencies – NZ Police, DoC, St John, Coast Guard, LandSAR
- ▶ NZ Defence Force
- ▶ Science / Research Agencies (GNS / NIWA / ORC)

Ideally, an appropriately trained and qualified member from one or more of the above agencies would act as observer during wide area impact assessments. However, this may not be practical given the potential disruption to transport routes and communication networks following a severe event. Also, the requirement for some operators to fly to a location where agency representatives live or are based could cause undue delay. Therefore, if it is expedient to do so, representatives from the above agencies should, if practical, assume observer roles. However, if this is not practical, operators should continue with their RI taskings regardless. It should be noted that the FENZ certified operators are experienced at operating in hazardous conditions and are required to provide regular sitreps to the Air Division Commander or Air Operations Supervisor.

Community Response Plans (CRP's)

TACTICAL SITES

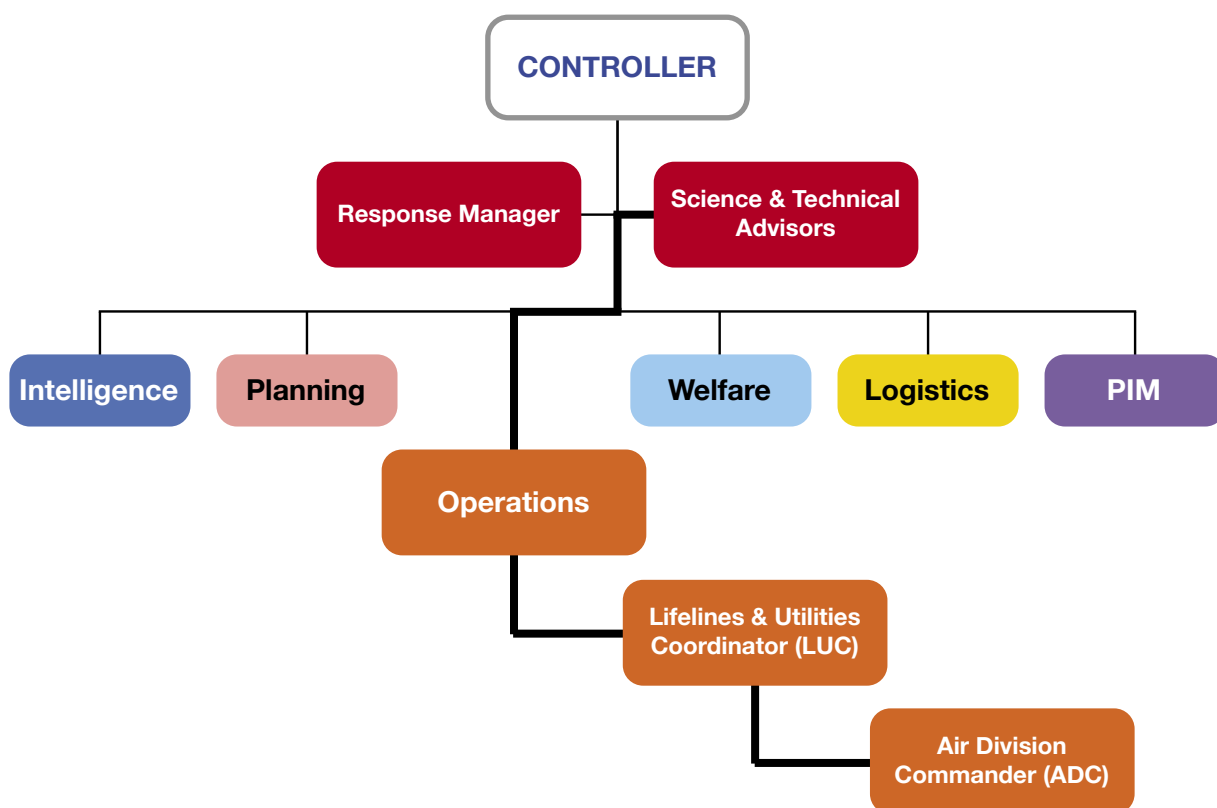
Emergency Management Otago, its response partners and local communities have in place localised Community Response Plans. These CRP's are based on the premise that local communities will be the first responders to severe events in their respective localities, before official response agencies are able to react. In some cases, this could be hours or days.

Tactical sites have been identified as part of the CRP process. These tactical sites are pre-planned locations for the set-up of staging and assembly points and helicopter landing points. ACC's must refer to the CRP's when tasking operators into communities, as the local community response group members and emergency services will be expecting helicopters to operate into these pre-planned locations.



Aerial Photography, Unmanned Aerial Systems (UAS / Drones) & Satellite Imagery

Aerial photography, drone and satellite imagery will be required by a diverse range of agencies and organisations (listed below) with response and recovery responsibilities. It will be the role of the RAD to coordinate and manage the demand for these missions within the Otago AoO. These specialist requests will initially be generated by the respective agencies through the Science & Technical Advisors function and then handed on to the RAD for deployment via the Operations Manager, as illustrated in the CIMS structure below. This procedure will also ensure that the information gathered by the various agencies is made available to the CIMS intelligence function.



LAND, MARINE AND ENVIRONMENTAL MANAGEMENT AGENCIES

Otago Regional Council (ORC)
Land Information NZ (LINZ)
Department of Conservation (DOC)
Ministry for the Environment (MfE)
Environment Protection Authority (EPA)
Landcare Research New Zealand
AgResearch NZ
Maritime NZ
Iwi / Ngāi Tahu

SCIENTIFIC, METEOROLOGICAL & GEOLOGICAL AGENCIES

GNS Science

Ministry of Business, Innovation, and Employment (MBIE)

National Institute of Water and Atmospheric Research (NIWA)

GeoNet

The Meteorological Service of New Zealand Limited (MetService)

Earthquake Commission (EQC)

Universities – Otago, Canterbury & Auckland

Mountain Research Centre Aotearoa NZ (MRC)

BUILT ENVIRONMENT & INFRASTRUCTURE

Ministry of Business, Innovation, and Employment (MBIE)

Ministry for the Environment (MfE)

Earthquake Commission (EQC)

Territorial Local Authorities (TLA's)

Lifelines & Utilities (CDEM Act 2002)

NZTA / Waka Kotahi

Specialist Geospatial Agencies e.g. Eagle Technology

Professional Engineering Providers & Consultancies e.g. WSP / Tonkin & Taylor / AECOM /

Kestrel Group

Building Research Association of New Zealand (BRANZ)

CIVIL DEFENCE AGENCIES

National Emergency Management Agency (NEMA)

Emergency Management Otago (Otago CDEM) / Neighbouring CDEM Groups

NZ Defence Force (NZDF)

Fire & Emergency NZ (FENZ)

NZ Police

Territorial Local Authorities (TLA's)

Lifelines & Utilities (CDEM Act 2002)

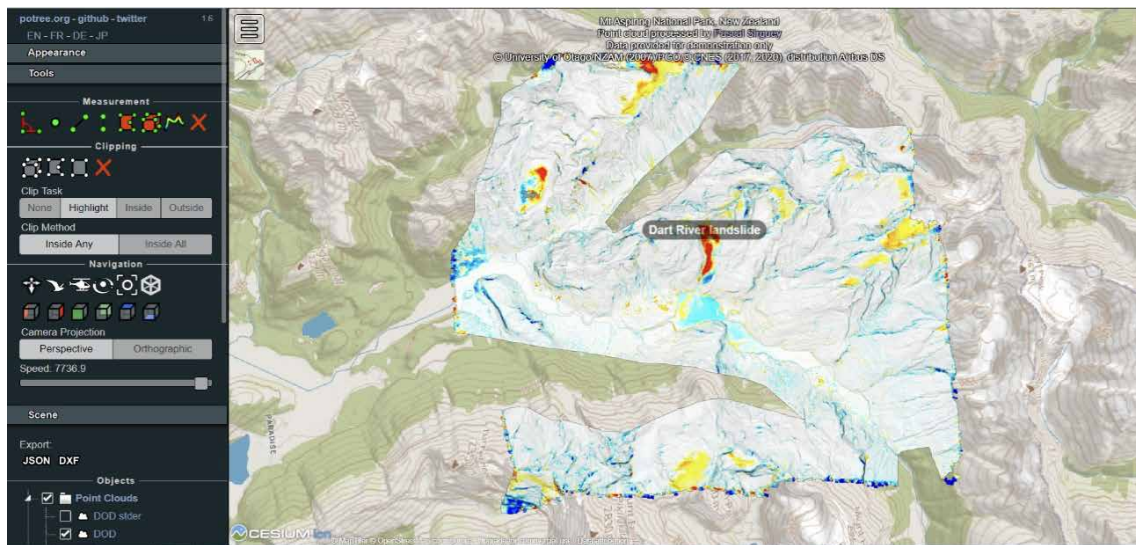
Specialist airborne camera technology is available that significantly enhances what coordination centre (CC) personnel can view. It is possible that while helicopters are airborne and following their reconnaissance instruction (RI) tracks, footage can be beamed directly into CC's. Alternatively, detailed footage can be recorded and downloaded at the completion of RI missions. This footage can improve the quality of intelligence products, thus enhancing situational awareness. Footage can also be shared with response partners and lifeline & utility agencies, be made available to the media, and provide emergency management governance with real-time updates.



shotover.com



trakkasystems.com



Satellite Image Credit – Dart River Landslide - Mountain Research Centre Aotearoa NZ / The Matariki Project



Fire & Emergency NZ's Urban Search & Rescue (USAR) Task Forces have specialist UAS capability. This resource can be made available for damage assessment depending on their operational priorities. Lifeline & Utility agencies will also have access to UAS / drone capability. The mixture of aircraft and UAS / drone activity must be closely monitored by the RAD and ACC's. CDEM related UAS / drone flights must have the approval of the local ACC before flights are undertaken.

NOTE: Any unmanned aerial system (UAS / drone) operators must be certified under Civil Aviation Regulation (CAR) Parts 101 & 102

Aerodromes & Airport Operators

Dunedin International Airport (NZDN) and Queenstown Airport (NZQN) are the major commercial aerodromes within the Otago Area of Operations (AoO). Their locations, runways and infrastructure make them suitable choices as emergency hubs for cargo, passenger, evacuation, medevac, and logistics operations. Dunedin Airport is the designated location for the Otago CDEM regional air desk (RAD) due to its strategic location and available facilities. Queenstown Airport is the designated Aviation Coordination Centre (ACC) for the Queenstown Lakes AoO.

Wanaka (NZWF) and Alexandra (NZLX) aerodromes with their paved runways are the other two alternate emergency logistics hubs in the Otago AoO's.

NOTE: Assessment of the structural integrity of runways, taxiways and parking aprons will be a priority following a major seismic event. Respective airport owners and operators have in place procedures for these assessments. Close liaison with the airport operators, Airways NZ and Air NZ will be a priority for the RAD to establish the operational status of the runways within the Otago area of Operations (AoO). Cross border awareness of the operational status of airports and their supporting infrastructure in adjoining CDEM regions must also be established.

AIP New Zealand NZDN AD 2 - 51.1

DUNEDIN AERODROME

ELEV 4
NZDN
TOWER: 120.7 122.4 ATIS: 126.45 UNATTENDED: 120.7

Aerodrome control service not provided for movements within area designated by ...

Mehland Air Flightline Aviation

Rescue Fire TWR

VOR 8211

ELEV 3
500 x 300 m

RWY 03/21
1900 x 46 m

RWY 21
1700 x 230 m

CWY 60 m

E 170 11 200°

E 170 12 00°

S 45 55 30°

S 45 55 30°

S 45 55 41 E 170 11 54

© Civil Aviation Authority

DUNEDIN AERODROME

Effective: 12 SEP 19

NZDN AD 2 - 52.1 AIP New Zealand

Certificated Aerodrome 11 NM W of Dunedin

DUNEDIN OPERATIONAL DATA (1)

NZDN

RWY

RWY	SFC	Strength	Gp	Slope	ASDA	Take-off distance			LDG DIST
						1:40	1:50	1:62.5	
03/21	B	PCN 60/F/D/W/T	8	Nil	1900	1960 1960	1960 1960	1960 ¹ 1960 ²	1900

Note:
¹ RWY 03 TODA @ 1:62.5 applies to curved flight path. Turn commences @ 10462 m from origin and follows true bearing 108° on a 2450 m radius or 1050 radius of turn. Due to obstacle outside Obstacle Limitation Surface.
² RWY 21 TODA @ 1:62.5 applies to curved flight path. Turn commences @ Henley NDB and follows true bearing 226°. Due to critical obstacle.
 RESA: RWY 03 RESA 240 x 150 m
 RWY 21 RESA 240 x 150 m

Critical Obstacles

RWY	Obstacle	Distance from SOT (m)	Height (ft) AMSL
21	Pylon	15658	748

MINIMA

RWY	IFR Take-off	
	Day	Night
03 ¹	1300-3000	1300-5
21 ¹	700-3000	1000-5
03 ²	700-3000	1000-5
21 ³	1300-3000	1300-5

¹ Reduced take-off minima available during TWR HR — not below 0-400, OPS below 800 metres visibility subject to availability of serviceable secondary power supply and automatic switch-over.
² Visual circuit after take-off and departure via HL NDB.
³ Visual circuit after take-off and departure via MI NDB.

LIGHTING

Runway: 03/21 LIL ALS/2 bar; PAPI 3.0°/TCH 58; LIH RWY

Aerodrome: ABN FLG W 2.5 SEC WDI

Taxiway: CL RWY 03 & 21 turning nodes: edge

Apron: Edge, floodlighting

Road traffic lighting system, approach RWY 21 A/FLG R

Outside of Dunedin Tower hours of service, remote control of lighting available from Christchurch Control 129.3 MHz or by phone 0800 626 756 (Landline users only) or (03) 358 1509 (cellphone users), advising runway to be used. Brilliance adjustments may take up to one minute to action. Advise Christchurch Control when requirement complete.

Caution: Lights will not operate or settings will not be able to be changed if communication line failure occurs.
Standby power available.

DUNEDIN OPERATIONAL DATA (1)

Effective: 30 JAN 20

© Civil Aviation Authority

AIP New Zealand NZQN AD 2 - 51.1

QUEENSTOWN
AERODROME (1)

ELEV 1171
NZQN
TOWER: 118.1 128.9 DELIVERY: 121.9 ATIS: 126.4 UNATTENDED: 118.1

Changes from b. NOV 7. Circuit RWY 14 base line moved northern approach. Circuit RWY 14/32 amended.

AIP New Zealand NZQN AD 2 - 52.1

QUEENSTOWN
OPERATIONAL DATA (1)

Certificated Aerodrome 4 NM E of Queenstown

RWY

RWY	SFC	Strength	Gp	Slope	ASDA	Take-off distance			LDG DIST
						1:20	1:25	1:62.5	
05 ⁵ 23 ⁵	B	PCN 47 F/C/X/T	8	0.19U 0.19D	1839 1829		1911 ¹ 1889 ²	See Note ³	1777 1777
14	B	ESWL 5700	5 4	0.30D	790	820			720
32	B	ESWL 5700	5 5	0.30U	820	850 ⁴			720

¹ Includes 62 m starter extension and 72 m clearway.
² Includes 52 m starter extension and 60 m clearway.
³ Take-off EOLs are based on a 1:25 slope obstacle free surface 60 m wide commencing 60 m from the end of the runway diverging at 10% to a final width of 580 m at 2500 m. Operators of aircraft which have more stringent take-off flight path requirements should obtain obstacle survey data from the airport operator.
⁴ RWY 32 TODA based on a 1:20 slope obstacle free surface 60 m wide commencing 30 m from end of runway with a right hand Rate 1 turn (100 kt TAS) commencing at the start of the surface. Aircraft to commence right hand turn upon passing the upwind threshold.
RESA: RWY 05 and RWY 23 90 x 90 m
⁵ RWY grooved for full length.

MINIMA

RWY	IFR Take-off	
	Day	Night
05/23*	2300 - 5	+

* Reduced take-off minima RWY 05/23 available to operators authorised by CAANZ, during TWR HR.
+ Night IFR take-off available to operators authorised by CAANZ only.

LIGHTING

Runway: 05 PAPI 3.2⁵/TCH 50⁶ LIH RWY REIL LIH RWY CL LIH APP
23 PAPI 3.2⁵/TCH 50 LIH RWY REIL LIH RWY CL LIH APP

LIH RWY, LIH APP, LIH CL, REIL available for approved operators only
RWY 05/23 PAPI only to be used at night when established on RWY CL between DA and THR due terrain

Use of lighting at night restricted to air transport operators who have specific CAANZ approval.
⁶ RWY 05 PAPI aligned 5° to the right of the extended runway centreline.

Aerodrome: WDI
Taxiway: TWY A4 CL
Apron: Floodlighting
Standby power available

(continued)

Effective: 30 JAN 20

S 45 01 16 E 168 44 21
© Civil Aviation Authority

QUEENSTOWN
AERODROME (1)

Effective: 10 SEP 20

© Civil Aviation Authority

QUEENSTOWN
OPERATIONAL DATA (1)

NOTE: The charts above are not for navigational use.

Mass Evacuation / Medevac – Queenstown Lakes Area of Operations

(AoO)

The Queenstown Lakes AoO presents a unique challenge when planning for mass evacuations. Its geographic location, hazardscape, infrastructure, tourist and ski field numbers and diverse resident population combine to potentially hamper mass evacuation options. Most large NZ population centres are on the coast, which gives emergency planners the options of road, marine or aerial evacuation modes. Strong potential for damage to the roading network into Queenstown Lakes AoO, particularly after a severe seismic event, effectively leaves aerial evacuation as the only pragmatic option, at least in the early stages of a response.

The tables below are indicative only of the potential number of evacuees that could be transported out of the Queenstown Lakes AoO to various New Zealand and Australian destinations within a 12 – 24 hour period.

INDICATIVE AVIATION TRANSPORT PLAN EX NZQN

New Zealand Destinations

DISEMBARKATION AIRPORT	AIRCRAFT TYPE & (NUMBER DEPLOYED)	PAX #	FLIGHT TURN-AROUND TIMES	12 HOURS	24 HOURS	12 HOURS	24 HOURS	12 HOURS	24 HOURS
				720	1440	TOTAL PAX	TOTAL PAX	# PAX X # AIRCRAFT	# PAX X # AIRCRAFT
Invercargill NZNV	Bombardier Q300 (x 5)	50	119	6	12	304	608	1519	3038
Dunedin NZDN	ATR's (x 6)	68	134	5	11	366	732	2195	4390
Christchurch NZCH	A320's - Air NZ (x 4)	171	127	6	11	969	1938	3876	7752
Wellington NZWN	A320's - Air NZ (x 4)	171	238	3	6	517	1033	2067	4134
Auckland NZAA	A320's - Air NZ (x 6)	171	327	2	4	377	753	2259	4518
								TOTAL 11916	TOTAL 23831

Australian Destinations

DISEMBARKATION AIRPORT	AIRCRAFT TYPE & (NUMBER DEPLOYED)	PAX #	FLIGHT TURN-AROUND TIMES	12 HOURS	24 HOURS	12 HOURS	24 HOURS	12 HOURS	24 HOURS
				720	1440	TOTAL PAX	TOTAL PAX	# PAX X # AIRCRAFT	# PAX X # AIRCRAFT
Coolangatta	A320 - Jet Star (x 6)	171	450	2	3	273	547	1640	3281
Brisbane	737-800 - Qantas (x 6)	174	465	2	3	383	539	2299	3235
Sydney	737-800 - Qantas (x 6)	174	393	2	4	319	637	1911	3823
Melbourne	A320 - Jet Star (x 6)	171	426	2	3	289	578	1734	3467
								TOTAL 7584	TOTAL 13806

As stated, the AESOP is not a medevac plan. That is the direct responsibility of the Accident Compensation Corporation (ACC), the Ministry of Health, District Health Boards, and their contracted service delivery agents such as St John, Air Ambulance and Rescue Helicopter services. RNZAF aircraft could also be part of medevac operations. Also, with the relative proximity of Australian Defence Force (ADF) / RAAF bases within 3-4 hours flying time and the large number of Australian visitors into the Queenstown Lakes AoO, there is a strong possibility that ADF / RAAF aircraft will be deployed.

The table below is indicative only of the number of stretchers (litters) that could be available from NZDF / ADF forces for medevac:

INDICATIVE AVIATION MEDEVAC CAPACITY EX NZQN

New Zealand & Australian Destinations

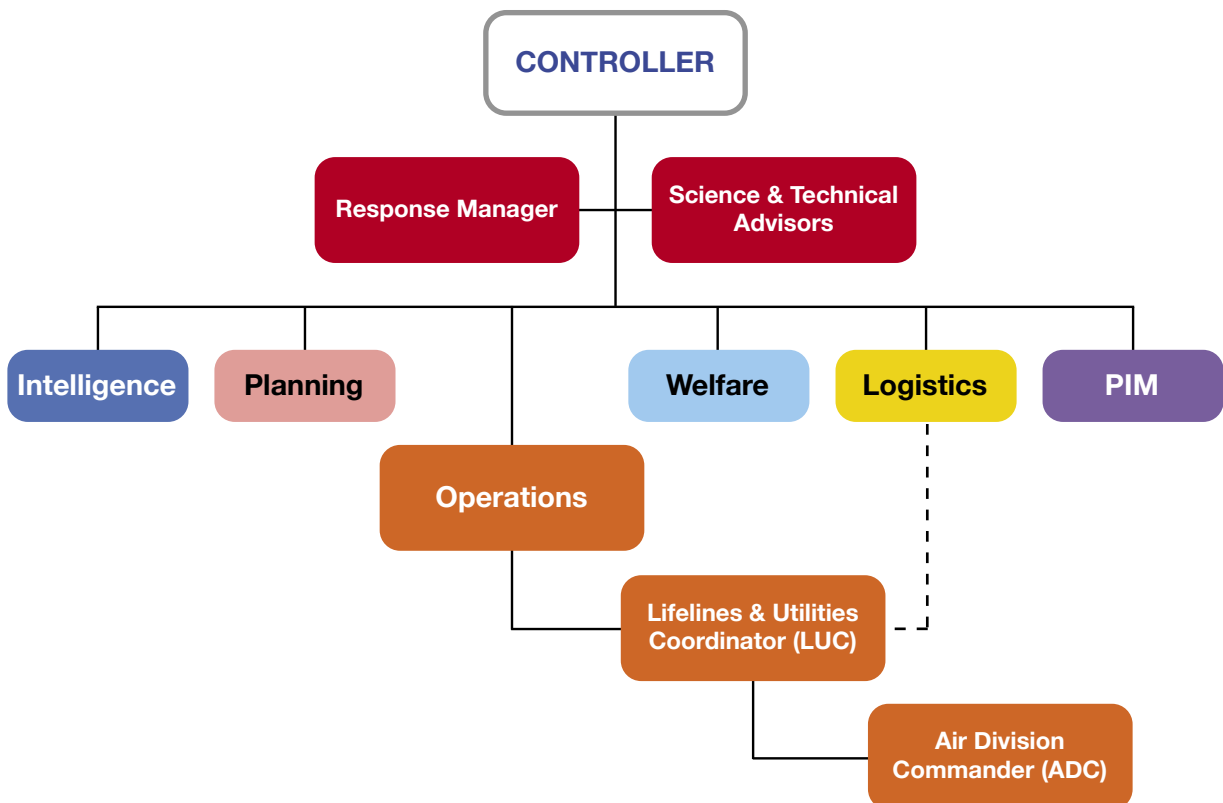
DISEMBARKATION AIRPORT	AIRCRAFT TYPE & (NUMBER DEPLOYED)	MEDEVAC	FLIGHT TURN-AROUND TIMES	12 HRS	24 HRS	12 HRS	24 HRS	12 HRS	24 HRS
				720	1440	TOTAL PAX	TOTAL PAX	# PAX X # AIRCRAFT	# PAX X # AIRCRAFT
Whenuapai	Boing 757 (x 1)	20	265	3	5	54	109	54	109
Whenuapai	Hercules C130(H) (x 3)	70	474	2	3	106	213	319	638
Richmond	Hercules C130(J) (x 3)	74	502	1	3	106	212	318	636
Amberley	Boing C-17 Globemaster III (x 2)	134	474	2	3	204	408	408	815
Richmond	C27(J) Spartan (x 3)	36	516	1	3	50	101	151	302
								TOTAL 1250	TOTAL 4565

Flight Time Recording and Payment

There is no expectation under the FENZ MoU that FENZ will reimburse aircraft operators for services rendered on behalf of Emergency Management Otago. It is assumed, however, that FENZ will provide the appropriate number of its personnel to fulfil the expectations of the MoU on an “in kind” basis as part of their duties under the CDEM Act 2002 and the collaborative spirit of the MoU.

The reconnaissance instructions (RI) discussed above contain estimated flight times in an agreed schedule and give prior approval for the operators to undertake flight operations based on these agreed estimates. Flight times of more than 25% of these respective estimates RI will need the approval of the ECC / EOC response manager, operations or logistics manager, or group / local controller.

All taskings other than the initial RI missions must be processed through the logistics function of the ECC or EOC’s. This is to ensure all flights are authorised and meet the Controllers’ objectives. A logistics operative from the finance sub-function should be deployed to the RAD or ACC to facilitate timely and accurate tasking approval.




NOTE: Search & rescue and medevac flights will be the direct responsibility of dedicated rescue helicopter, air ambulance or Defence Force aircraft. Agencies such as the Rescue Coordination Centre of NZ, NZ Police, Fire & Emergency NZ, St John, District Health Board EOC staff, Department of Conservation or NZDF personnel may authorise and task mercy, medevac, or search & rescue flights. It must be clearly stated and recorded as to which of the above agencies has requested and authorised any such flight before tasking by an ACC.

The FENZ flight operations return form (RF-244) will be used for flight time reconciliation.

Sample FENZ Flight Operations Return Form (RF-244)

New Zealand Fire Aviation Management Flight Operations Return RF-244

Incident Name



Date: / / Shift:

Operator

Company name: _____

Postal address: _____

Telephone: _____

Email: _____

Client

Aircraft Type

Helicopter Fixed wing

Description: _____

Registration: _____ ZK _____

Flight no	Destination/operations area	Flight times	Net time	Charge (Decimal) time	Task code	Flight details
	From/at	Start				
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

(Use decimal hours for Total Charge Time, for guidance to the nearest minute use the table in the "Orange Book")

TOTAL CHARGE TIME

General comments

Pilot Signature: _____

Flight verification (By RFA.)

Signature: _____

Fire auth order no.: _____

Pilot name (print): _____

Name (print): _____

Fire auth charge code: _____

NO INVOICE WILL BE PAID UNLESS ACCOMPANIED BY THE FULLY COMPLETED WHITE COPY OF THIS RETURN ON A DAILY BASIS. This return must be completed and signed by both the pilot and senior fire authority officer at the fire for flight verification, at the incident, or immediately after.

White copy – invoice

Pink copy – customer

Yellow copy – operator

Roles of Non FENZ Certified Aircraft & Itinerant Aircraft Movements

The AESOP deals primarily with the deployment and tasking of Otago based FENZ certified operators. Those operators will have surge capacity for other taskings after their RI missions are completed. These taskings may consist of medevacs, evacuations, humanitarian missions, further detailed infrastructure damage assessment, response personnel placement, logistical lifting & transport, media, and VIP flights. Other local operators, in particular fixed wing operators who are not part of the FENZ agreement will also be available for deployment. It can also be expected that itinerant operators will position themselves into the Otago area of operations seeking work or under contract to external clients. The engagement of non FENZ certified operators will be at the discretion of the Operations Manager on advice from the ADC or AOS.

Fixed Wing Aircraft

Utilisation of fixed wing aircraft should occur in the early phases of the response to ensure the following benefits are realised:

- Local knowledge and experience of operators
- Range and endurance advantages
- Weight & balance range
- Instrument Meteorological Conditions (IMC) capability
- STOL capabilities
- Speed & height advantages
- Fuel Burn / Fuel Efficiency
- Fuel types i.e. avgas option
- Passenger to weight ratios
- Passenger numbers
- Payload capacities
- Conversion to air ambulance capability
- Increased ground support capacity
- Cost

An ideal configuration for joint rotary and fixed wing aircraft operations would be the “Hub & Spoke / Shuttle” i.e. helicopters operating within their optimal limits and envelopes, lifting cargo or transporting casualties or passengers to or from a central hub (aerodrome / airfield) where the payload or casualties are transferred to or from a suitable fixed wing aircraft. The fixed wing aircraft with their superior speed, endurance and fuel burn would undertake a “shuttle” service between hubs.

Hub & Spoke / Shuttle Configuration

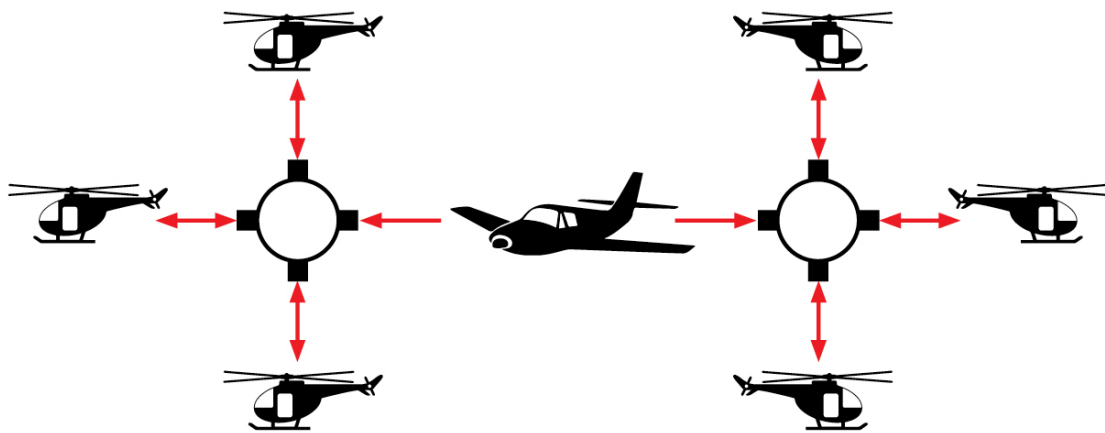


Photo Credit – Air Milford

Airspace Control

Airways NZ is the controlling agency for New Zealand's domestic Flight Information Region (FIR). They are responsible for the provision of air traffic management services to New Zealand's airlines and commercial aircraft operators, airports, general aviation communities, and the New Zealand Defence Force. Otago region's airspace consists of controlled (Class C) and uncontrolled (Class D) airspace. Of note are the Dunedin and Queenstown airport control areas and control zones. All AESOP activity within these control zones and areas will strictly comply with Air Traffic Control (ATC) instructions and CAA regulations.

QUEENSTOWN CONTROL ZONE (CTR) AND CONTROL AREA (CTA)

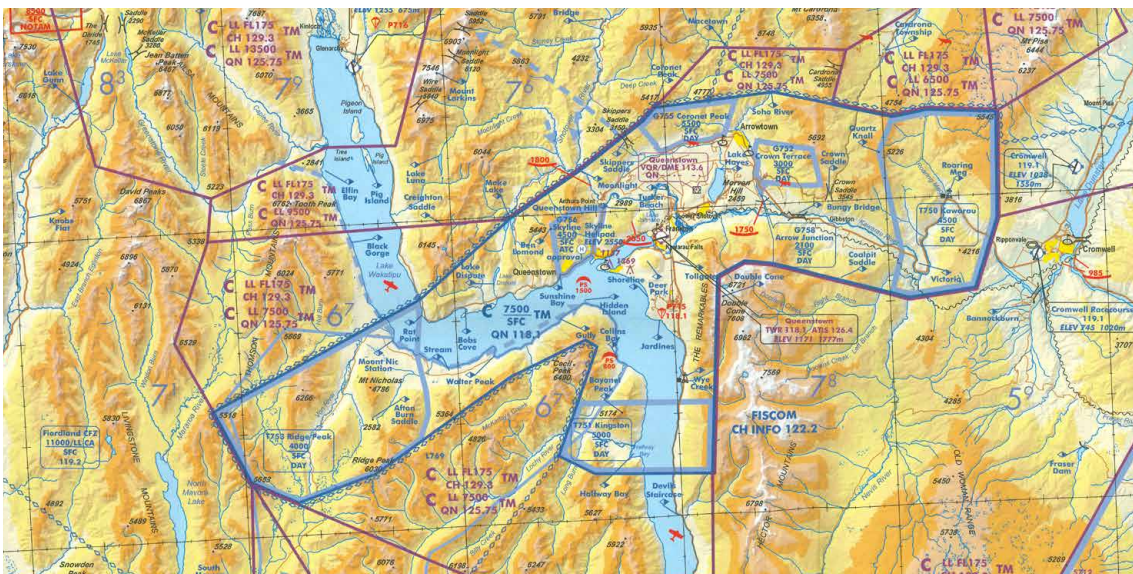


Chart Credit – Aeropath Ltd for CAA New Zealand

DUNEDIN CONTROL ZONE (CTR) AND CONTROL AREA (CTA)



Chart Credit – Aeropath Ltd for CAA New Zealand

It is not the intention or role of the regional air desk (RAD) to act as a default air traffic control centre (ATC). As stated, airspace management is the responsibility of Airways NZ. The RAD's primary role is the coordination of aircraft movements associated with the response to a severe natural event.

Close coordination and cooperation between Otago CDEM and Airways NZ will be required when there is an identified need to restrict access to designated airspace due to the response priorities of a Local Controller or the Group Controller.

Under the CDEM Act 2002, CDEM can restrict aircraft movements within a defined area that is under a state of emergency.

Section 85 – Emergency powers of Civil Defence Emergency Management Groups

While a state of emergency is in force in its area, a Civil Defence Emergency Management Group may –

(f) prohibit or regulate land, air, and water traffic within the area or district to the extent necessary to conduct civil defence emergency management:

Section 89 – Removal of aircraft, vessels, vehicles, etc

If a state of emergency is in force, a controller or a constable, or any other person acting under the authority of a controller or constable, may, in order to prevent or limit the extent of the emergency –

a. remove from any place within the area or district in respect of which the state of emergency is in force, any aircraft, hovercraft, ship or ferry or other vessel, train, or vehicle impeding civil defence emergency management; and

b. if reasonably necessary for that purpose, use force or break into the aircraft, hovercraft, ship or ferry or other vessel, train, or vehicle

A procedure will be implemented whereby Otago CDEM, through the air desk, will communicate in the first instance with local ATC personnel requesting the immediate restriction of airspace above a particular area of operations (AoO), zone, division, or sector. Airways personnel will then formalise the airspace restriction by the notices to airmen (NOTAM) procedure.

Fuel Supplies & Management

It is expected that the designated aviation operators will have access to a supply of fuel sufficient for the uninterrupted deployment of their aircraft for the duration of their respective reconnaissance instructions (RI) missions. Aircraft operator's SOPs should also provide for the deployment and reinforcement of fuel supplies including to areas with restricted vehicle access. For events of a longer duration the air division commander (ADC) in collaboration with the EEC / EOC logistics managers will facilitate a coordinated approach for the supply of bulk fuel under the provisions of the CDEM Act 2002 and the Otago / Southland Fuel Plan. (For further guidance refer to the Supplement, Use of Aircraft at Wildfires; Section 22 – Fuel management and refuelling).

The Otago / Southland CDEM Fuel Plan (2019) provides guidance on access to aviation fuel during a state of emergency and the prioritisation of access to fuel supplies. Designated aviation operators will have access to fuel as “critical customers” for a Level 3 – Major event (Refer to Table 8, Page 13 “Fuel Supply Escalation Level – Regional Level” of the Fuel Plan).

CDEM Act 2002 Section 90 – Requisitioning powers

- (1) This section applies if a state of emergency is in force and, in the opinion of a Controller or a constable, the action authorised by this section is necessary for the preservation of human life.*
- (2) The Controller or constable, or a person authorised by him or her, may direct the owner or person for the time being in control of any land, building, vehicle, animal, boat, apparatus, implement, earth-moving equipment, construction materials or equipment, furniture, bedding, food, medicines, medical supplies, or any other equipment, materials, or supplies, to immediately place that property (requisitioned property).*
 - (a) under his or her control and direction; or*
 - (b) under the control and direction of a Controller or a constable, or person authorised by that Controller or constable, if that person has requested the person making the requisition to do so on his or her behalf.*
- (3) A person exercising any power conferred on him or her by this section must give to the owner or person in charge of the requisitioned property a written statement specifying the property that is requisitioned and the person under whose control the property is to be placed.*

NOTE: This section of the Act would be applied for the requisitioning of aviation fuel supplies if necessary. A record must be kept of the requisitioned fuel in order to compensate the owner.

Fixed Installation Aviation Fuel Supplies

(November 2020)

AERODROME	ICAO	FUEL TYPE	SUPPLIER	QUANTITY (LITRES)	BACK-UP POWER
Alexandra	NZLX	Jet A1	Z Energy	50 000	No
Alexandra	NZLX	Avgas	Z Energy	40 000	No
Balclutha	NZBA	Jet A1	RD Petroleum	18 000	No
Balclutha	NZBA	Avgas	RD Petroleum	15 000	No
Central South Island Base	HERBERT	Jet A1	Airfuels	50 000	Yes
Dunedin	NZDN	Jet A1	Air BP	75 000	Yes
Dunedin	NZDN	Avgas	Z Energy	20 000	No
Glenorchy	NZGY	Jet A1	Airfuels	20 000	Yes
Gore	NZGC	Jet A1	Air BP	50 000	No
Gore	NZGC	Avgas	Air BP	40 000	No
Invercargill	NZNV	Jet A1	Air BP	50 000	No
Invercargill	NZNV	Avgas	RD Petroleum	20 000	No
Invercargill	NZNV	Jet A1	Z Energy	50 000	No
Invercargill	NZNV	Avgas	Z Energy	30 000	No
Jacks Point	JARDINES	Jet A1	Air BP	10 000	No
Lister Base	MILTON	Jet A1	RD Petroleum	20 000	Yes
Oamaru	NZOU	Jet A1	Z Energy	20 000	No
Oamaru	NZOU	Avgas	Z Energy	30 000	No
Omarama	NZOA	Avgas	Z Energy	50 000	No
Queenstown	NZQN	Jet A1	Air BP	360 000	Yes
Queenstown	NZQN	Jet A1	Air BP	60 000	No
Queenstown	NZQN	Avgas	Air BP	60 000	No
Queenstown	NZQN	Jet A1	Z Energy	50 000	No
Roxburgh	NZRX	Jet A1	RD Petroleum	20 000	No
Taieri	NZTI	Jet A1	Air BP	40 000	No
Taieri	NZTI	Avgas	Z Energy	20 000	No
Te Anau / Manapouri	NZMO	Jet A1	Air BP	50 000	No
Te Anau / Manapouri	NZMO	Avgas	Air BP	50 000	No
Wanaka	NZWF	Jet A1	Air BP	40 000	Yes
Wanaka	NZWF	Jet A1	Air BP	40 000	Yes
Wanaka	NZWF	Jet A1	Z Energy	40 000	Yes
Wanaka	NZWF	Avgas	Z Energy	40 000	Yes
Wanaka	NZWF	Avgas	Air BP	40 000	Yes

Private Aviation Fuel Supplies

Most aviation operators will have access to their own fuel supplies. Operators who are part of the AESOP Reconnaissance Plan and have specific reconnaissance instructions (RI's) are expected to have access to sufficient fuel supplies to undertake their designated missions. It is not within the scope of the AESOP to identify each and every private fuel tank, tanker vehicle, or fuel trailer that operators collectively own. NOTE: Operators need to have contingency plans in place by which they can pump fuel from their private storage facilities when there are widespread and extended power outages.



Photo Credit – HeliGlenorchy